

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Apple Green Glaze

Product Use: A cone 06 ceramic glaze for use on earthenware.

Date Prepared: July 31, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	0.1 – 1.0	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	30 -60	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	3 – 7	Not available	Not available
Zirconium vanadium zircon	68186-95-8	1 – 5	> 2200 mg/kg (Oral, Rat)	> 5.1 mg/L air (rats; 4 hours)
Zirconium praseodymium zircon	68187-15-5	1 – 5	> 2200 mg/kg (Oral, Rat)	> 5.5 mg/L air (rats; 4 hours)

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures Skin contact: Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.

Eye contact: Wash immediately with plenty of water. If irritation persists, seek medical attention.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the product: Irritating gases and vapors. Metal compounds.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: TWA (Ontario)

Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Frit	10 mg/m ³ (PNOS*)
Kaolin	2 mg/m ³
Zirconium vanadium zircon	5 mg/m ³ (zirconium compound)
Zirconium praseodymium zircon	5 mg/m ³ (zirconium compound)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, pale green fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: None known.

Incompatible materials: None known.

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush, contains a binder that reduces the risk of dusting when dry, and has a very low crystalline silica content.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust.

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans. Zircon contains trace quantities of naturally occurring radioactive uranium, thorium and radium (106-120 Pico curies/gram). Overexposure to respirable dusts containing radioactive uranium, thorium and radium may cause lung cancer.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: July 31, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Apple Green Glaze
Product Use: A cone 06 ceramic glaze for use on earthenware.
Date Prepared: July 31, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	0.1 – 1.0	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	30 -60	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	3 – 7	Not available	Not available
Zirconium vanadium zircon	68186-95-8	1 – 5	> 2200 mg/kg (Oral, Rat)	> 5.1 mg/L air (rats; 4 hours)
Zirconium praseodymium zircon	68187-15-5	1 – 5	> 2200 mg/kg (Oral, Rat)	> 5.5 mg/L air (rats; 4 hours)

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures **Skin contact:** Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact: Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.
Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.
Specific hazards arising from the product: Irritating gases and vapors. Metal compounds.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: TWA (Ontario)

Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Frit	10 mg/m ³ (PNOS*)
Kaolin	2 mg/m ³
Zirconium vanadium zircon	5 mg/m ³ (zirconium compound)
Zirconium praseodymium zircon	5 mg/m ³ (zirconium compound)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, pale green fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: None known.

Incompatible materials: None known.

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush, contains a binder that reduces the risk of dusting when dry, and has a very low crystalline silica content.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust.

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans. Zircon contains trace quantities of naturally occurring radioactive uranium, thorium and radium (106-120 Pico curies/gram). Overexposure to respirable dusts containing radioactive uranium, thorium and radium may cause lung cancer.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: July 31, 2017

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SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Autumn Rustle Glaze
Product Use: A cone 6 ceramic glaze for use on porcelain and stoneware clay bodies.
Date Prepared: Aug. 3, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	3– 7	>22,500 mg/kg (Oral, Rat)	Not available
Frit ¹	65997-18-4	15 – 40	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	5– 10	Not available	Not available
Tin oxide	18282-10-5	1 – 5	>2000 mg/kg (Oral, rat)	Not available
Ferric oxide	1309-37-1	1 – 5	>5,000 mg/kg Oral, Rat	Not available
Titanium dioxide	13463-67-7	1 – 5	>10000 mg/kg Oral, Rat	Not Available

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures **Skin contact** (mechanical irritant): Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact (mechanical irritant): Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: No specific first-aid is generally necessary since the adverse health effects associated with exposure to crystalline silica (quartz) result from chronic exposures.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.
Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.
Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total) may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: TWA (Ontario)

Frit	10 mg/m ³ (PNOS*)
Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Kaolin	2 mg/m ³
Tin oxide	2 mg/m ³
Ferric oxide	5 mg/m ³
Titanium dioxide	10 mg/m ³

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, rust-red fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: Contact with powerful oxidizing agents

Incompatible materials: Powerful oxidizing such as fluorine, chlorine trifluoride, and oxygen difluoride

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush and contains a binder that reduces the risk of dusting when dry.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust.

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans. Titanium dioxide is possibly carcinogenic to humans through inhalation (IARC classification Group 2B).

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

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Date of preparation: Aug. 3, 2017

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SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Black Glaze
Product Use: A cone 06 ceramic glaze for use on earthenware.
Date Prepared: Aug. 1, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	0.1 – 1.0	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	30 – 60	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	3 – 7	Not available	Not available
Chromium green-black hematite	68909-79-5	1 – 5	>2000 mg/kg (Oral, rat)	>5.14 mg/L air (rats, 4 hrs.)

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures **Skin contact:** Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact: Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the product: Irritating gases and vapors. Oxides of chromium and other metal compounds.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: TWA (Ontario)

Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Frit	10 mg/m ³ (PNOS*)
Kaolin	2 mg/m ³
Chromium green-black hematite	0.5 mg/m ³ (inorganic chromium III compound)
* PNOS: Particles (insoluble or poorly soluble) not otherwise specified	

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, dark gray fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: None known.

Incompatible materials: None known.

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and

vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush, contains a binder that reduces the risk of dusting when dry, and has a very low crystalline silica content.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust.

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 1, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Blue Glaze
Product Use: A cone 06 ceramic glaze for use on earthenware.
Date Prepared: Aug. 1, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	0.1 – 1.0	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	30 -60	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	3 – 7	Not available	Not available
Zirconium vanadium zircon	68186-95-8	3 – 7	> 2200 mg/kg (Oral, Rat)	> 5.1 mg/L air (rats; 4 hours)

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures
Skin contact: Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact: Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.
Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.
Specific hazards arising from the product: Irritating gases and vapors. Metal compounds.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: TWA (Ontario)

Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Frit	10 mg/m ³ (PNOS*)
Kaolin	2 mg/m ³
Zirconium vanadium zircon	5 mg/m ³ (zirconium compound)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, blue fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: None known.

Incompatible materials: None known.

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and

vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush, contains a binder that reduces the risk of dusting when dry, and has a very low crystalline silica content.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust.

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans. Zircon contains trace quantities of naturally occurring radioactive uranium, thorium and radium (106-120 Pico curies/gram). Overexposure to respirable dusts containing radioactive uranium, thorium and radium may cause lung cancer.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 1, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Bright Orange Glaze
Product Use: A cone 06 ceramic glaze for use on earthenware.
Date Prepared: Aug. 1, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	0.1 – 1.0	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	30 – 60	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	3 – 7	Not available	Not available
Cadmium selenium orange, zircon encapsulated	99749-34-5	1 – 5	Not available	Not available

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures **Skin contact:** Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact: Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total) may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: **TWA (Ontario)**

Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Frit	10 mg/m ³ (PNOS*)
Kaolin	2 mg/m ³
Glaze Stain	0.01 mg/m ³ (cadmium compound) 0.2 mg/m ³ (selenium compound) 5 mg/m ³ (zirconium compound)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, orange fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: None known.

Incompatible materials: None known.

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush, contains a binder that reduces the risk of dusting when dry, and has a very low crystalline silica content.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Overexposure to cadmium may cause kidney damage through ingestion or inhalation, lung disease through inhalation, and bone disease if high levels are ingested. The cadmium compound in this product is encapsulated within acid-insoluble zircon. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust. Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans. Chronic overexposure to cadmium compounds may result in lung cancer, although a definite cause-effect relationship has not been fully established. Zircon contains trace quantities of naturally occurring radioactive uranium, thorium and radium (106-120 Pico curies/gram). Overexposure to respirable dusts containing radioactive uranium, thorium and radium may cause lung cancer.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 1, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Caramel Glaze
Product Use: A cone 06 ceramic glaze for use on earthenware.
Date Prepared: Aug. 1, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning:

Contains crystalline silica.
May cause cancer by inhalation.
Causes damage to lungs through prolonged or repeated exposure by inhalation.
Do not breathe dust, mist or fume.
In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	0.1 – 1.0	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	30 – 60	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	3 – 7	Not available	Not available
Zinc iron chromite spinel	68186-88-9	1 – 5	>2000 mg/kg (Oral, rat)	>5.06 mg/L air (rats, 4 hrs.)

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures
Skin contact: Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact: Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.
Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.
Specific hazards arising from the product: Irritating gases and vapors. Oxides of chromium and other metal compounds.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: TWA (Ontario)

Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Frit	10 mg/m ³ (PNOS*)
Kaolin	2 mg/m ³
Zinc iron chromite spinel	0.5 mg/m ³ (inorganic chromium III compound)
* PNOS: Particles (insoluble or poorly soluble) not otherwise specified	

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, brown fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: None known.

Incompatible materials: None known.

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and

vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush, contains a binder that reduces the risk of dusting when dry, and has a very low crystalline silica content.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust.

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 1, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Chestnut Glaze
Product Use: A cone 06 ceramic glaze for use on earthenware.
Date Prepared: Aug. 1, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning:

Contains crystalline silica.
May cause cancer by inhalation.
Causes damage to lungs through prolonged or repeated exposure by inhalation.
Do not breathe dust, mist or fume.
In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	0.1 – 1.0	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	30 – 60	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	3 – 7	Not available	Not available
Zinc iron chromite spinel	68186-88-9	1 – 5	>2000 mg/kg (Oral, rat)	>5.06 mg/L air (rats, 4 hrs.)

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures
Skin contact: Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact: Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.
Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.
Specific hazards arising from the product: Irritating gases and vapors. Oxides of chromium and other metal compounds.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: **TWA (Ontario)**

Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Frit	10 mg/m ³ (PNOS*)
Kaolin	2 mg/m ³
Zinc iron chromite spinel	0.5 mg/m ³ (inorganic chromium III compound)
* PNOS: Particles (insoluble or poorly soluble) not otherwise specified	

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, dark brown fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: None known.

Incompatible materials: None known.

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and

vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush, contains a binder that reduces the risk of dusting when dry, and has a very low crystalline silica content.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust.

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 1, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Chili Pepper Red Glaze
Product Use: A cone 06 ceramic glaze for use on earthenware.
Date Prepared: Aug. 1, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	0.1 – 1.0	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	30 – 60	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	3 – 7	Not available	Not available
Cadmium selenium red, zircon encapsulated	72828-62-7	1 – 5	Not available	Not available

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.
3. Zircon encapsulated cadmium sulphoselenide

SECTION 4. FIRST AID MEASURES

Procedures **Skin contact:** Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact: Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total) may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in

compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: TWA (Ontario)

Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Frit	10 mg/m ³ (PNOS*)
Kaolin	2 mg/m ³
Glaze Stain	0.01 mg/m ³ (cadmium compound) 0.2 mg/m ³ (selenium compound) 5 mg/m ³ (zirconium compound)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, red fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: None known.

Incompatible materials: None known.

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush, contains a binder that reduces the risk of dusting when dry, and has a very low crystalline silica content.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Overexposure to cadmium may cause kidney damage through ingestion or inhalation, lung disease through inhalation, and bone disease if high levels are ingested. The cadmium compound in this product is encapsulated within acid-insoluble zircon. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust. Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans. Chronic overexposure to cadmium compounds may result in lung cancer, although a definite cause-effect relationship has not been fully established. Zircon contains trace quantities of naturally occurring radioactive uranium, thorium and radium (106-120 Pico curies/gram). Overexposure to respirable dusts containing radioactive uranium, thorium and radium may cause lung cancer.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 1, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Chili Pepper Red Glaze
Product Use: A cone 06 ceramic glaze for use on earthenware.
Date Prepared: Aug. 1, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	0.1 – 1.0	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	30 – 60	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	3 – 7	Not available	Not available
Cadmium selenium red, zircon encapsulated	72828-62-7	1 – 5	Not available	Not available

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.
3. Zircon encapsulated cadmium sulphoselenide

SECTION 4. FIRST AID MEASURES

Procedures **Skin contact:** Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact: Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total) may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in

compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: TWA (Ontario)

Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Frit	10 mg/m ³ (PNOS*)
Kaolin	2 mg/m ³
Glaze Stain	0.01 mg/m ³ (cadmium compound) 0.2 mg/m ³ (selenium compound) 5 mg/m ³ (zirconium compound)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, red fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: None known.

Incompatible materials: None known.

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush, contains a binder that reduces the risk of dusting when dry, and has a very low crystalline silica content.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Overexposure to cadmium may cause kidney damage through ingestion or inhalation, lung disease through inhalation, and bone disease if high levels are ingested. The cadmium compound in this product is encapsulated within acid-insoluble zircon. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust. Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans. Chronic overexposure to cadmium compounds may result in lung cancer, although a definite cause-effect relationship has not been fully established. Zircon contains trace quantities of naturally occurring radioactive uranium, thorium and radium (106-120 Pico curies/gram). Overexposure to respirable dusts containing radioactive uranium, thorium and radium may cause lung cancer.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 1, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Cobaltic Sea Glaze
Product Use: A cone 6 ceramic glaze for use on porcelain and stoneware clay bodies.
Date Prepared: Aug. 3, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	3– 7	>22,500 mg/kg (Oral, Rat)	Not available
Frit ¹	65997-18-4	15 – 40	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	5– 10	Not available	Not available
Titanium dioxide	13463-67-7	1 – 5	>10000 mg/kg Oral, Rat	Not Available
Cobalt silicate olivine	68187-40-6	0.1 – 1.0	1630 mg/kg (Oral, rat)	>5.3 mg/L air (rats; 4 hours)

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures **Skin contact** (mechanical irritant): Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact (mechanical irritant): Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: No specific first-aid is generally necessary since the adverse health effects associated with exposure to crystalline silica (quartz) result from chronic exposures.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.
Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.
Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total) may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: TWA (Ontario)

Frit	10 mg/m ³ (PNOS*)
Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Kaolin	2 mg/m ³
Titanium dioxide	10 mg/m ³
Cobalt silicate olivine	0.02 mg/m ³ (inorganic cobalt compound) 0.1 mg/m ³ (crystalline silica, respirable)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, pale gray fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: Contact with powerful oxidizing agents

Incompatible materials: Powerful oxidizing such as fluorine, chlorine trifluoride, and oxygen difluoride

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush and contains a binder that reduces the risk of dusting when dry.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust.

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans. Titanium dioxide is possibly carcinogenic to humans through inhalation (IARC classification Group 2B).

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 3, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Coppermican Sky Glaze
Product Use: A cone 6 ceramic glaze for use on porcelain and stoneware clay bodies.
Date Prepared: Apr. 27, 2018

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1
Acute Aquatic Toxicity Category 1
Chronic Aquatic Toxicity Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.
Causes damage to lungs through prolonged or repeated exposure by inhalation.
Very toxic to aquatic life with long lasting effects.



Do not breathe dust, mist or fume.
In case of inadequate ventilation, wear respiratory protection
Avoid release to the environment.
Collect spillage.
Dispose of contents/container in accordance with local/national/international regulations.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	3– 7	>22,500 mg/kg (Oral, Rat)	Not available
Frit ¹	65997-18-4	15 – 40	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	5– 10	Not available	Not available
Titanium dioxide	13463-67-7	1 – 5	>10000 mg/kg Oral, Rat	Not Available
Ferric-Ferrous Oxide	1317-61-9	0.1 – 1.0	Not Available	Not Available
Cupric oxide	1317-38-0	0.5 – 1.5	Not available	Not available
Cobalt silicate olivine	68187-40-6	0.1 – 1.0	1630 mg/kg (Oral, rat)	>5.3 mg/L air (rats; 4 hours)

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures **Skin contact** (mechanical irritant): Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact (mechanical irritant): Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: No specific first-aid is generally necessary since the adverse health effects associated with exposure to crystalline silica (quartz) result from chronic exposures.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total) may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: TWA (Ontario)

Frit	10 mg/m ³ (PNOS*)
Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Kaolin	2 mg/m ³
Titanium dioxide	10 mg/m ³
Ferric oxide	5 mg/m ³
Cupric oxide	1 mg/m ³ (dusts and mists, as copper)
Cobalt silicate olivine	0.02 mg/m ³ (inorganic cobalt compound) 0.1 mg/m ³ (crystalline silica, respirable)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, pale gray fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: Contact with powerful oxidizing agents

Incompatible materials: Powerful oxidizing such as fluorine, chlorine trifluoride, and oxygen difluoride

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush and contains a binder that reduces the risk of dusting when dry.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust.

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER IARC** - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans. Titanium dioxide is possibly carcinogenic to humans through inhalation (IARC classification Group 2B).

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

Cupric oxide is very toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Do not empty into waterways. Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Apr. 27, 2018

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Dark Gray Glaze
Product Use: A cone 06 ceramic glaze for use on earthenware.
Date Prepared: Aug. 1, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	0.1 – 1.0	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	30 – 60	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	3 – 7	Not available	Not available
Zirconium silicate	14940-68-2	3 – 7	Not available	Not available
Chromium green-black hematite	68909-79-5	0.1 – 1	>2000 mg/kg (Oral, rat)	>5.14 mg/L air (rats, 4 hrs.)

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures **Skin contact:** Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact: Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the product: Irritating gases and vapors. Oxides of chromium and other metal compounds.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in

compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits:

TWA (Ontario)

Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Frit	10 mg/m ³ (PNOS*)
Kaolin	2 mg/m ³
Zirconium silicate	5 mg/m ³ (zirconium compound)
Chromium green-black hematite	0.5 mg/m ³ (inorganic chromium III compound)
* PNOS: Particles (insoluble or poorly soluble) not otherwise specified	

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, gray fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: None known.

Incompatible materials: None known.

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush, contains a binder that reduces the risk of dusting when dry, and has a very low crystalline silica content.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust.

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans. Zircon contains trace quantities of naturally occurring radioactive uranium, thorium and radium (106-120 Pico curies/gram). Overexposure to respirable dusts containing radioactive uranium, thorium and radium may cause lung cancer.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 1, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Ferric Fervor Glaze
Product Use: A cone 6 ceramic glaze for use on porcelain and stoneware clay bodies.
Date Prepared: Aug. 3, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	3– 7	>22,500 mg/kg (Oral, Rat)	Not available
Frit ¹	65997-18-4	15 – 40	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	5– 10	Not available	Not available
Titanium dioxide	13463-67-7	1 – 5	>10000 mg/kg Oral, Rat	Not Available
Ferric-Ferrous Oxide	1317-61-9	1 – 5	Not Available	Not Available

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures **Skin contact** (mechanical irritant): Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact (mechanical irritant): Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: No specific first-aid is generally necessary since the adverse health effects associated with exposure to crystalline silica (quartz) result from chronic exposures.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total) may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: **TWA (Ontario)**

Frit	10 mg/m ³ (PNOS*)
Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Kaolin	2 mg/m ³
Titanium dioxide	10 mg/m ³
Ferric-Ferrous oxide	10 mg/m ³ (PNOS*)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, pale gray fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: Contact with powerful oxidizing agents

Incompatible materials: Powerful oxidizing such as fluorine, chlorine trifluoride, and oxygen difluoride

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush and contains a binder that reduces the risk of dusting when dry.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust.

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans. Titanium dioxide is possibly carcinogenic to humans through inhalation (IARC classification Group 2B).

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 3, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: French Green Glaze
Product Use: A cone 06 ceramic glaze for use on earthenware.
Date Prepared: Aug. 1, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	0.1 – 1.0	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	30 – 60	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	3 – 7	Not available	Not available
Cobalt chromite spinel	68187-49-5	0.5 – 1.5	> 10000 mg/kg (Oral, Rat)	> 5.05 mg/L air (rats; 4 hours)

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures **Skin contact:** Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact: Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total) may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: TWA (Ontario)

Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Frit	10 mg/m ³ (PNOS*)
Kaolin	2 mg/m ³
Cobalt chromite spinel	0.02 mg/m ³ (inorganic cobalt compound) 0.5 mg/m ³ (inorganic chromium compound) 10 mg/m ³ (zinc oxide)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, blue-green fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: None known.

Incompatible materials: None known.

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush, contains a binder that reduces the risk of dusting when dry, and has a very low crystalline silica content.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. SILICOSIS The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust.

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. CANCER IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. AUTOIMMUNE DISEASES Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. TUBERCULOSIS Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. KIDNEY DISEASE Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. NON-MALIGNANT RESPIRATORY DISEASES There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 1, 2017

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SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: French Green Glaze
Product Use: A cone 06 ceramic glaze for use on earthenware.
Date Prepared: Aug. 1, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	0.1 – 1.0	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	30 – 60	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	3 – 7	Not available	Not available
Cobalt chromite spinel	68187-49-5	0.5 – 1.5	> 10000 mg/kg (Oral, Rat)	> 5.05 mg/L air (rats; 4 hours)

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures **Skin contact:** Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact: Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total) may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: **TWA (Ontario)**

Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Frit	10 mg/m ³ (PNOS*)
Kaolin	2 mg/m ³
Cobalt chromite spinel	0.02 mg/m ³ (inorganic cobalt compound) 0.5 mg/m ³ (inorganic chromium compound) 10 mg/m ³ (zinc oxide)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, blue-green fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: None known.

Incompatible materials: None known.

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush, contains a binder that reduces the risk of dusting when dry, and has a very low crystalline silica content.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. SILICOSIS The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust.

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. CANCER IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. AUTOIMMUNE DISEASES Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. TUBERCULOSIS Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. KIDNEY DISEASE Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. NON-MALIGNANT RESPIRATORY DISEASES There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 1, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: High Irony Glaze

Product Use: A cone 6 ceramic glaze for use on porcelain and stoneware clay bodies.

Date Prepared: Aug. 3, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	3– 7	>22,500 mg/kg (Oral, Rat)	Not available
Frit ¹	65997-18-4	15 – 40	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	5– 10	Not available	Not available
Titanium dioxide	13463-67-7	1 – 5	>10000 mg/kg Oral, Rat	Not Available
Ferric oxide	1309-37-1	1 – 5	>5,000 mg/kg Oral, Rat	Not available

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures Skin contact (mechanical irritant): Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.

Eye contact (mechanical irritant): Wash immediately with plenty of water. If irritation persists, seek medical attention.

Inhalation: No specific first-aid is generally necessary since the adverse health effects associated with exposure to crystalline silica (quartz) result from chronic exposures.

Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total) may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: TWA (Ontario)

Frit	10 mg/m ³ (PNOS*)
Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Kaolin	2 mg/m ³
Titanium dioxide	10 mg/m ³
Ferric oxide	5 mg/m ³

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, rust-red fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: Contact with powerful oxidizing agents

Incompatible materials: Powerful oxidizing such as fluorine, chlorine trifluoride, and oxygen difluoride

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush and contains a binder that reduces the risk of dusting when dry.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. SILICOSIS The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust.

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. CANCER IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. AUTOIMMUNE DISEASES Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. TUBERCULOSIS Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. KIDNEY DISEASE Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. NON-MALIGNANT RESPIRATORY DISEASES There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans. Titanium dioxide is possibly carcinogenic to humans through inhalation (IARC classification Group 2B).

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 3, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Magenta Magic Glaze
Product Use: A cone 6 ceramic glaze for use on porcelain and stoneware clay bodies.
Date Prepared: Aug. 3, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	7 – 13	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	10 – 30	2000 mg/kg (Oral, rat)	Not available
Wollastonite ²	13983-17-0	10 – 30	Not available	Not available
Kaolin ³	1332-58-7	7 – 13	Not available	Not available
Chrome tin sphene	68187-12-2	3 – 7	> 2200 mg/kg (Oral, Rat)	> 5.4 mg/L air (rats; 4 hours)

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Calcium silicate mineral.
3. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures **Skin contact** (mechanical irritant): Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact (mechanical irritant): Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: No specific first-aid is generally necessary since the adverse health effects associated with exposure to crystalline silica (quartz) result from chronic exposures.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.
Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.
Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total) may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: TWA (Ontario)

Frit	10 mg/m ³ (PNOS*)
Wollastonite	10 mg/m ³ (PNOS*)
Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Kaolin	2 mg/m ³
Chrome tin sphene	0.5 mg/m ³ (inorganic chromium III compound) 2 mg/m ³ (inorganic tin compound) 0.1 mg/m ³ (crystalline silica, respirable)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, pink fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: Contact with powerful oxidizing agents

Incompatible materials: Powerful oxidizing such as fluorine, chlorine trifluoride, and oxygen difluoride

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush and contains a binder that reduces the risk of dusting when dry.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust. Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 3, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Maroon Glaze
Product Use: A cone 06 ceramic glaze for use on earthenware.
Date Prepared: Aug. 1, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	0.1 – 1.0	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	30 – 60	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	3 – 7	Not available	Not available
Chrome tin sphene	68187-12-2	3 – 7	> 2200 mg/kg (Oral, Rat)	> 5.4 mg/L air (rats; 4 hours)

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures
Skin contact: Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact: Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.
Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.
Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total) may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: **TWA (Ontario)**

Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Frit	10 mg/m ³ (PNOS*)
Kaolin	2 mg/m ³
Chrome tin sphene	0.5 mg/m ³ (inorganic chromium III compound) 2 mg/ m ³ (inorganic tin compound) 0.1 mg/m ³ (crystalline silica, respirable)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, maroon fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: None known.

Incompatible materials: None known.

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush, contains a binder that reduces the risk of dusting when dry, and has a very low crystalline silica content.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust. Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 1, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Midnight Blue Glaze
Product Use: A cone 06 ceramic glaze for use on earthenware.
Date Prepared: Aug. 1, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning:

Contains crystalline silica.
May cause cancer by inhalation.
Causes damage to lungs through prolonged or repeated exposure by inhalation.
Do not breathe dust, mist or fume.
In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	0.1 – 1.0	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	30 – 60	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	3 – 7	Not available	Not available
Cobalt chromite spinel	68187-49-5	0.5 – 1.5	> 10000 mg/kg (Oral, Rat)	> 5.05 mg/L air (rats; 4 hours)
Cobalt silicate olivine	68187-40-6	0.5 – 1.5	1630 mg/kg (Oral, rat)	>5.3 mg/L air (rats; 4 hours)

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures
Skin contact: Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact: Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.
Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.
Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total) may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits:

TWA (Ontario)

Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Frit	10 mg/m ³ (PNOS*)
Kaolin	2 mg/m ³
Cobalt chromite spinel	0.02 mg/m ³ (inorganic cobalt compound) 0.5 mg/m ³ (inorganic chromium compound) 10 mg/m ³ (zinc oxide)
Cobalt silicate olivine	0.02 mg/m ³ (inorganic cobalt compound) 0.1 mg/m ³ (crystalline silica, respirable)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, blue-green fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: None known.

Incompatible materials: None known.

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: Skin contact: May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush, contains a binder that reduces the risk of dusting when dry, and has a very low crystalline silica content.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust.

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 1, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Moss Green Glaze
Product Use: A cone 06 ceramic glaze for use on earthenware.
Date Prepared: Aug. 1, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	0.1 – 1.0	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	30 -60	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	3 – 7	Not available	Not available
Chrome oxide	1308-38-9	1 – 5	>5,000 mg/kg Oral, Rat	Not available

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures
Skin contact: Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact: Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the product: Irritating gases and vapors. Oxides of chromium and other metal compounds.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: **TWA (Ontario)**

Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Frit	10 mg/m ³ (PNOS*)
Kaolin	2 mg/m ³
Chrome oxide	0.5 mg/m ³ (inorganic chromium III compound)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, green fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: None known.

Incompatible materials: Chrome oxide is incompatible with strong oxidizers, chlorine trifluoride, lithium and oxygen difluoride.

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush, contains a binder that reduces the risk of dusting when dry, and has a very low crystalline silica content.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust. Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 1, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Mulberry Glaze
Product Use: A cone 06 ceramic glaze for use on earthenware.
Date Prepared: Aug. 1, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	0.1 – 1.0	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	30 – 60	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	3 – 7	Not available	Not available
Chrome tin sphene	68187-12-2	1– 5	> 2200 mg/kg (Oral, Rat)	> 5.4 mg/L air (rats; 4 hours)
Cobalt tin alumina spinel	68608-09-3	1– 5	Not available	Not available

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures **Skin contact:** Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact: Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total) may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits:

TWA (Ontario)

Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Frit	10 mg/m ³ (PNOS*)
Kaolin	2 mg/m ³
Chrome tin sphene	0.5 mg/m ³ (inorganic chromium III compound) 2 mg/m ³ (inorganic tin compound) 0.1 mg/m ³ (crystalline silica, respirable)
Cobalt tin alumina spinel	2 mg/m ³ (inorganic tin compound) 0.02 mg/m ³ (inorganic cobalt compound) 1 mg/m ³ (aluminum metal and insoluble compounds)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, maroon fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: None known.

Incompatible materials: None known.

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush, contains a binder that reduces the risk of dusting when dry, and has a very low crystalline silica content.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust. Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 1, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Nickelodeon Glaze
Product Use: A cone 6 ceramic glaze for use on porcelain and stoneware clay bodies.
Date Prepared: Aug. 3, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	3– 7	>22,500 mg/kg (Oral, Rat)	Not available
Frit ¹	65997-18-4	15 – 40	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	5– 10	Not available	Not available
Titanium dioxide	13463-67-7	1 – 5	>10000 mg/kg Oral, Rat	Not Available
Nickel Oxide	1313-99-1	0.5 – 1.5	>5000 mg/kg Oral, Rat	Not Available

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures Skin contact: Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. Cleanse wounds thoroughly to remove any particles. If symptoms persist, call a physician.

Inhalation: No specific first-aid is generally necessary since the adverse health effects associated with exposure to crystalline silica (quartz) result from chronic exposures.

Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total) may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in

compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: TWA (Ontario)

Frit	10 mg/m ³ (PNOS*)
Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Kaolin	2 mg/m ³
Titanium dioxide	10 mg/m ³
Nickel Oxide	0.2 mg/m ³ (insoluble nickel compound)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, pale gray fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: Contact with powerful oxidizing agents

Incompatible materials: Powerful oxidizing such as fluorine, chlorine trifluoride, and oxygen difluoride

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush and contains a binder that reduces the risk of dusting when dry.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. SILICOSIS The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust.

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. CANCER IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. AUTOIMMUNE DISEASES Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. TUBERCULOSIS Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. KIDNEY DISEASE Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. NON-MALIGNANT RESPIRATORY DISEASES There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: Prolonged and intimate skin contact with nickel oxide can cause an allergic skin rash in previously sensitized individuals.

Carcinogenicity of the product: Inhalation of respirable mists or dusts may cause cancer after prolonged exposure (crystalline silica). The IARC has concluded that nickel compounds are carcinogenic to humans through inhalation. Nickel oxide has caused tumors at the site of injection in rodents. Titanium dioxide is possibly carcinogenic to humans through inhalation (IARC classification Group 2B).

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

Nickel oxide may cause long lasting harmful effects to aquatic life.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 3, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Nickelous Nickelby Glaze
Product Use: A cone 6 ceramic glaze for use on porcelain and stoneware clay bodies.
Date Prepared: Aug. 3, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	3– 7	>22,500 mg/kg (Oral, Rat)	Not available
Frit ¹	65997-18-4	15 – 40	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	5– 10	Not available	Not available
Titanium dioxide	13463-67-7	1 – 5	>10,000 mg/kg Oral, Rat	Not Available
Nickel Oxide	1313-99-1	1 – 5	>11,000 mg/kg Oral, Rat	Not Available

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures Skin contact: Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. Cleanse wounds thoroughly to remove any particles. If symptoms persist, call a physician.

Inhalation: No specific first-aid is generally necessary since the adverse health effects associated with exposure to crystalline silica (quartz) result from chronic exposures.

Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total) may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in

compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: TWA (Ontario)

Frit	10 mg/m ³ (PNOS*)
Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Kaolin	2 mg/m ³
Titanium dioxide	10 mg/m ³
Nickel Oxide	0.2 mg/m ³ (insoluble nickel compound)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, pale gray fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: Contact with powerful oxidizing agents

Incompatible materials: Powerful oxidizing such as fluorine, chlorine trifluoride, and oxygen difluoride

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush and contains a binder that reduces the risk of dusting when dry.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. SILICOSIS The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust.

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. CANCER IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. AUTOIMMUNE DISEASES Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. TUBERCULOSIS Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. KIDNEY DISEASE Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. NON-MALIGNANT RESPIRATORY DISEASES There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: Prolonged and intimate skin contact with nickel oxide can cause an allergic skin rash in previously sensitized individuals.

Carcinogenicity of the product: Inhalation of respirable mists or dusts may cause cancer after prolonged exposure (crystalline silica). The IARC has concluded that nickel compounds are carcinogenic to humans through inhalation. Nickel oxide has caused tumors at the site of injection in rodents. Titanium dioxide is possibly carcinogenic to humans through inhalation (IARC classification Group 2B).

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

Nickel oxide may cause long lasting harmful effects to aquatic life.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 3, 2017

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SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Plum Perfect

Product Use: A cone 6 ceramic glaze for use on porcelain and stoneware clay bodies.

Date Prepared: Aug. 3, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	7 – 13	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	10 – 30	2000 mg/kg (Oral, rat)	Not available
Wollastonite ²	13983-17-0	10 – 30	Not available	Not available
Kaolin ³	1332-58-7	7 – 13	Not available	Not available
Chrome tin sphene	68187-12-2	3 – 7	> 2200 mg/kg (Oral, Rat)	> 5.4 mg/L air (rats; 4 hours)
Cobalt silicate olivine	68187-40-6	0.5 – 1.5	1630 mg/kg (Oral, rat)	>5.3 mg/L air (rats; 4 hours)

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Calcium silicate mineral.
3. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures Skin contact (mechanical irritant): Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.

Eye contact (mechanical irritant): Wash immediately with plenty of water. If irritation persists, seek medical attention.

Inhalation: No specific first-aid is generally necessary since the adverse health effects associated with exposure to crystalline silica (quartz) result from chronic exposures.

Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total)

may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: **TWA (Ontario)**

Frit	10 mg/m ³ (PNOS*)
Wollastonite	10 mg/m ³ (PNOS*)
Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Kaolin	2 mg/m ³
Chrome tin sphene	0.5 mg/m ³ (inorganic chromium III compound) 2 mg/m ³ (inorganic tin compound) 0.1 mg/m ³ (crystalline silica, respirable)
Cobalt silicate olivine	0.02 mg/m ³ (inorganic cobalt compound) 0.1 mg/m ³ (crystalline silica, respirable)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, maroon-red fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: Contact with powerful oxidizing agents

Incompatible materials: Powerful oxidizing such as fluorine, chlorine trifluoride, and oxygen difluoride

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush and contains a binder that reduces the risk of dusting when dry.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust. Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 3, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Polished Pewter Glaze
Product Use: A cone 06 ceramic glaze for use on earthenware.
Date Prepared: April 27 , 2018

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1
Acute Aquatic Toxicity Category 1
Chronic Aquatic Toxicity Category 1

Warning: Contains crystalline silica.



May cause cancer by inhalation.
Causes damage to lungs through prolonged or repeated exposure by inhalation.
Harmful if ingested.
Very toxic to aquatic life with long lasting effects.



Do not breathe dust, mist or fume.
In case of inadequate ventilation, wear respiratory protection
Do not ingest
Avoid release to the environment.
Collect spillage.
Dispose of contents/container in accordance with local/national/international regulations.

Emergency Overview: Harmful if ingested. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	0.1 – 1.0	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	30 – 60	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	3 – 7	Not available	Not available
Zinc oxide	1314-13-2	1 – 5	Not available	Not available
Cupric oxide	1317-38-0	3 – 7	Not available	Not available
Manganese tetroxide	1317-35-7	1 – 5	Not available	Not available
Ferric oxide	1309-37-1	1 – 5	>5,000 mg/kg Oral, Rat	Not available

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures **Skin contact:** Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact: Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total) may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: TWA (Ontario)

Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Frit	10 mg/m ³ (PNOS*)
Kaolin	2 mg/m ³
Zinc oxide	2 mg/m ³
Cupric oxide	1 mg/m ³ (dusts and mists, as copper)
Manganese tetroxide	0.2 mg/m ³ (inorganic manganese compound)
Ferric oxide	5 mg/m ³

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, rust-red fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: None known.

Incompatible materials: Strong acids and bases.

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea and irritation of mucous membranes.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Pre-existing lung disease may be aggravated by exposure. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush, contains a binder that reduces the risk of dusting when dry, and has a very low crystalline silica content.

Ingestion: Harmful if ingested. May cause gastrointestinal upset.

Effects of acute exposure to product: Ingestion may cause gastrointestinal irritation with symptoms such as nausea, vomiting and diarrhea.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Prolonged exposure to high levels of respirable manganese may adversely affect the central nervous system. Asthma, pneumonia and susceptibility to infection have been associated with exposure to respirable manganese dust. Chronic overexposure to copper dusts may cause respiratory disease. Respirable crystalline silica (quartz) can cause:

A. SILICOSIS The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust. Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. CANCER IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. AUTOIMMUNE DISEASES Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. TUBERCULOSIS Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. KIDNEY DISEASE Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. NON-MALIGNANT RESPIRATORY DISEASES There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

Cupric oxide and zinc oxide are very toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Do not empty into waterways. Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

Acute Aquatic Toxicity Category 1

Chronic Aquatic Toxicity Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: April 27, 2018

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Pumpnickel Glaze
Product Use: A cone 6 ceramic glaze for use on porcelain and stoneware clay bodies.
Date Prepared: Aug. 3, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	3– 7	>22,500 mg/kg (Oral, Rat)	Not available
Frit ¹	65997-18-4	15 – 40	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	5– 10	Not available	Not available
Titanium dioxide	13463-67-7	1 – 5	>10000 mg/kg Oral, Rat	Not Available
Nickel Oxide	1313-99-1	0.5 – 1.5	>5000 mg/kg Oral, Rat	Not Available
Cobalt silicate olivine	68187-40-6	0.5 – 1.5	1630 mg/kg (Oral, rat)	>5.3 mg/L air (rats; 4 hours)

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures **Skin contact:** Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. Cleanse wounds thoroughly to remove any particles. If symptoms persist, call a physician.

Inhalation: No specific first-aid is generally necessary since the adverse health effects associated with exposure to crystalline silica (quartz) result from chronic exposures.

Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total) may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: **TWA (Ontario)**

Frit	10 mg/m ³ (PNOS*)
Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Kaolin	2 mg/m ³
Titanium dioxide	10 mg/m ³
Nickel Oxide	0.2 mg/m ³ (insoluble nickel compound)
Cobalt silicate olivine	0.02 mg/m ³ (inorganic cobalt compound) 0.1 mg/m ³ (crystalline silica, respirable)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, pale gray fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: Contact with powerful oxidizing agents

Incompatible materials: Powerful oxidizing such as fluorine, chlorine trifluoride, and oxygen difluoride

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush and contains a binder that reduces the risk of dusting when dry.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust. Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: Prolonged and intimate skin contact with nickel oxide can cause an allergic skin rash in previously sensitized individuals.

Carcinogenicity of the product: Inhalation of respirable mists or dusts may cause cancer after prolonged exposure (crystalline silica). The IARC has concluded that nickel compounds are carcinogenic to humans through inhalation. Nickel oxide has caused tumors at the site of injection in rodents. Titanium dioxide is possibly carcinogenic to humans through inhalation (IARC classification Group 2B).

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

Nickel oxide may cause long lasting harmful effects to aquatic life.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 3, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Purple Haze
Product Use: A cone 6 ceramic glaze for use on porcelain and stoneware clay bodies.
Date Prepared: Aug. 3, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	7 – 13	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	10 – 30	2000 mg/kg (Oral, rat)	Not available
Wollastonite ²	13983-17-0	10 – 30	Not available	Not available
Kaolin ³	1332-58-7	7 – 13	Not available	Not available
Chrome tin sphene	68187-12-2	3 – 7	> 2200 mg/kg (Oral, Rat)	> 5.4 mg/L air (rats; 4 hours)
Cobalt silicate olivine	68187-40-6	0.1– 1.0	1630 mg/kg (Oral, rat)	>5.3 mg/L air (rats; 4 hours)

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures **Skin contact** (mechanical irritant): Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact (mechanical irritant): Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: No specific first-aid is generally necessary since the adverse health effects associated with exposure to crystalline silica (quartz) result from chronic exposures.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.
Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.
Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total) may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: **TWA (Ontario)**

Frit	10 mg/m ³ (PNOS*)
Wollastonite	10 mg/m ³ (PNOS*)
Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Kaolin	2 mg/m ³
Chrome tin sphene	0.5 mg/m ³ (inorganic chromium III compound) 2 mg/m ³ (inorganic tin compound) 0.1 mg/m ³ (crystalline silica, respirable)
Cobalt silicate olivine	0.02 mg/m ³ (inorganic cobalt compound) 0.1 mg/m ³ (crystalline silica, respirable)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, pale purple fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: Contact with powerful oxidizing agents

Incompatible materials: Powerful oxidizing such as fluorine, chlorine trifluoride, and oxygen difluoride

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: Skin contact: May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush and contains a binder that reduces the risk of dusting when dry.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust.

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 3, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Red Onion Glaze

Product Use: A cone 6 ceramic glaze for use on porcelain and stoneware clay bodies.

Date Prepared: Aug. 3, 2017

Manufacturer and Supplier:



The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel.: Not available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: Contains crystalline silica.

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust, mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable particulates may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	7 – 13	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	10 – 30	2000 mg/kg (Oral, rat)	Not available
Wollastonite ²	13983-17-0	10 – 30	Not available	Not available
Kaolin ³	1332-58-7	7 – 13	Not available	Not available
Chrome tin sphene	68187-12-2	3 – 7	> 2200 mg/kg (Oral, Rat)	> 5.4 mg/L air (rats; 4 hours)

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Calcium silicate mineral.
3. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures **Skin contact** (mechanical irritant): Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact (mechanical irritant): Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: No specific first-aid is generally necessary since the adverse health effects associated with exposure to crystalline silica (quartz) result from chronic exposures.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.

Extinguishing media, means of extinction: Product is not flammable or combustible. Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the product: Metal compounds. Oxides of carbon, sodium and irritating gases (<1%, total) may be liberated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: **TWA (Ontario)**

Frit	10 mg/m ³ (PNOS*)
Wollastonite	10 mg/m ³ (PNOS*)
Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Kaolin	2 mg/m ³
Chrome tin sphene	0.5 mg/m ³ (inorganic chromium III compound) 2 mg/m ³ (inorganic tin compound) 0.1 mg/m ³ (crystalline silica, respirable)

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, red fluid with mild odour.

Odour threshold: Not applicable.

Specific gravity: Approximately 1.6.

Vapour pressure: Not applicable.

Vapour density: Not applicable.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available.

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Flammability: Not flammable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: Contact with powerful oxidizing agents

Incompatible materials: Powerful oxidizing such as fluorine, chlorine trifluoride, and oxygen difluoride

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of hazardous reactions: Unlikely in normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Route of entry: **Skin contact:** May cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush and contains a binder that reduces the risk of dusting when dry.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust.

Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources".

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No information available.

Carcinogenicity of the product: Crystalline silica (quartz) inhaled from occupational sources is classified by IARC as carcinogenic to humans.

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Mutagenicity: No information available.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

SECTION 16. OTHER INFORMATION

Preparation information: Prepared by Jon Walls.

Contact information:

Telephone: 1-800-465-8544 ext.223

e-mail: jwalls@psh.ca

Date of preparation: Aug. 3, 2017

Although reasonable care has been taken in the preparation of the information contained herein, The Pottery Supply House extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product: Cone 6 Transparent
Product Use: A cone 6 ceramic glaze for use on porcelain and stoneware clay bodies.
Date Prepared: Aug. 4, 2017



Manufacturer and Supplier:
The Pottery Supply House Limited
1120 Speers Road
Oakville, ON, Canada L6L 2X4
Tel.: 1-800-465-8544
Emergency Tel: Not Available

SECTION 2. HAZARDS IDENTIFICATION



Classification:

Carcinogen Category 1A
Specific Target Organ Toxicity – Repeated Exposure Category 1

Warning: May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Do not breathe dust mist or fume.

In case of inadequate ventilation, wear respiratory protection.

Do not ingest.

Emergency Overview: Not acutely hazardous. Chronic exposure to respirable dusts or mists may cause lung disease.

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS#	Percentage	LD 50	LC 50
Crystalline silica (quartz)	14808-60-7	3– 7	>22,500 mg/kg Oral, Rat	Not available
Frit ¹	65997-18-4	30 – 60	2000 mg/kg (Oral, rat)	Not available
Kaolin ²	1332-58-7	5 – 10	Not available	Not available

1. Glass containing fused oxides of aluminum, boron, calcium, silicon and sodium. 2. Aluminum silicate mineral.

SECTION 4. FIRST AID MEASURES

Procedures **Skin contact** (mechanical irritant): Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Eye contact (mechanical irritant): Wash immediately with plenty of water. If irritation persists, seek medical attention.
Inhalation: No specific first-aid is generally necessary since the adverse health effects associated with exposure to crystalline silica (quartz) result from chronic exposures.
Ingestion: Only if victim is conscious, give plenty of water. Do not induce vomiting. Consult a physician if necessary.

SECTION 5. FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable.
Extinguishing media, means of extinction: Product is not flammable, combustible or explosive. Use extinguishing media appropriate for surrounding fire.
Hazardous combustion products: Metal compounds.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Procedures to be followed in case of leak or spill: Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

SECTION 7. HANDLING AND STORAGE

Handling procedures and equipment: Avoid dust/mist formation. Do not breathe dust or mist. If spraying, use adequate

exhaust ventilation. Keep airborne dust/mist concentrations below permissible exposure limits. In case of insufficient ventilation, wear a respirator approved for silica dust when spraying. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. When firing, use adequate kiln ventilation.

Storage: No special requirement. To prevent possible container damage, keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits:	TWA (Ontario)
Frit	10 mg/m ³ (PNOS*)
Crystalline silica (quartz)	0.1 mg/m ³ (respirable)
Kaolin	2 mg/m ³

* PNOS: Particles (insoluble or poorly soluble) not otherwise specified

Specific engineering controls to be used: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s). Ensure that eye washing facilities are nearby. If spraying, use a ventilated spray booth to minimize exposure to respirable mist. When firing, use adequate kiln ventilation.

Personal protective equipment to be used: In case of exposure to dust/mist, and in any case if such exposure is above regulatory limits (see above), wear a personal respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid/solid suspension.

Odour and appearance: Opaque, pale beige fluid with mild odour.

Odour threshold: Not available.

Specific gravity: Approximately 1.6.

Vapour pressure: Not available.

Vapour density: Not available.

Evaporation rate: Not available.

Boiling point: About 100°C for the liquid (water) portion. >1250°C for the solids portion.

Freezing point: About 0°C for the liquid (water) portion.

Decomposition temperature: Not available.

PH: Not available.

Solubility: Solids portion is insoluble in water.

Partition coefficient: Unavailable.

Viscosity: Not available

Coefficient of water/oil distribution: Not available.

Flash point and method of determination: Not applicable.

Upper flammable limit: Not applicable.

Lower flammable limit: Not applicable.

Auto-ignition temperature: Not applicable.

Explosion data – sensitivity to mechanical impact: Not explosive. Not sensitive.

Explosion data – sensitivity to static discharge: Not explosive. Not sensitive.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal use conditions.

Chemical stability: Stable under normal use conditions.

Conditions to avoid: Contact with powerful oxidizing agents.

Incompatible materials: Powerful oxidizing such as fluorine, chlorine trifluoride, and oxygen difluoride.

Hazardous decomposition products: None if stored normally. Thermal decomposition can produce irritating gases and vapors including oxides of carbon, nitrogen, and sulfur as well as toxic metal compounds.

Possibility of Hazardous reactions: Not under normal use conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Route of entry Skin contact: Prolonged skin contact may cause skin irritation.

Skin absorption: Not absorbed through the skin.

Eye contact: May cause abrasion of the cornea.

Inhalation: Contains about 10% crystalline silica (quartz). Chronic exposure may cause silicosis, cancer and other disorders. Dust or fumes from firing are irritating to the respiratory tract. The risk of exposure to hazardous respirable dust is low given that this product is typically applied by brush and contains a binder that reduces the risk of dusting when dry.

Ingestion: Not acutely hazardous. May cause gastrointestinal upset.

Effects of acute exposure to product: No effects expected.

Effects of chronic exposure to product: Excessive inhalation of fumes or dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Respirable crystalline silica (quartz) can cause:

A. **SILICOSIS** The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust. Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. Symptoms, if present, are shortness of breath, wheezing, cough and sputum production and may be associated with decreased and disabling lung function and death. It may lead to heart disease secondary to the lung disease.

B. **CANCER** IARC - The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources"

C. **AUTOIMMUNE DISEASES** Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. **TUBERCULOSIS** Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis.

E. **KIDNEY DISEASE** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers.

F. **NON-MALIGNANT RESPIRATORY DISEASES** There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases including chronic bronchitis, emphysema and small airways disease, particularly among smokers.

Irritancy of the product: Not a likely irritant.

Sensitization of the product: No known effects.

Carcinogenicity of the product: Inhalation of respirable mists or dusts may cause cancer after prolonged exposure.

Reproductive toxicity: No known effects.

Teratogenicity: No known effects.

Mutagenicity: No known effects.

Name of toxicologically synergistic products: None known.

LD50: Not established for this product. See Section 3 for information on ingredients.

LC50: Not established for this product. See Section 3 for information on ingredients.

SECTION 12. ECOLOGICAL INFORMATION

No data available for this product. No specific adverse effect known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal: Waste must be disposed of in accordance with federal, provincial and local environmental control regulations. Where possible recycling is preferred to disposal or incineration.

SECTION 14. TRANSPORT INFORMATION

Special shipping information: None.

SECTION 15. REGULATORY INFORMATION

This product has been classified

Carcinogen Category 1A

Specific Target Organ Toxicity – Repeated Exposure Category 1

in accordance with the hazard criteria of WHMIS 2015 and the SDS contains all of the information required by those regulations.

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