

Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.10.2023

Page 1 of 12

Metallic Color Pigment - Emerald

SECTION 1: Identification

Product identifier

Product name: Metallic Color Pigment - Emerald

Product code: EPMTTP10-MRLD

Recommended use of the product and restriction on use

Relevant identified uses: Not determined or not applicable.

Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer:

Canada

EcoPoxy Inc

Box 220

Morris, Manitoba R0G1K0

855-326-7699

info@ecopoxy.com

http:www.ecopoxy.com

Emergency telephone number:

ChemTel

ChemTel Inc

+1 813 248 0585 (24)

SECTION 2: Hazard identification

GHS classification: Not a hazardous substance or mixture

Label elements

Hazard pictograms: None

Signal Word: None

Hazard statements: None

Precautionary statements: None

Hazards not otherwise classified:

None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 12003-38-2	Fluorophlogopite	51-69
CAS number: 13463-67-7	Titanium Dioxide	30-47

Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.10.2023

Page 2 of 12

Metallic Color Pigment - Emerald

CAS number: 1308-38-9	Chromium (III) Oxide	10-12
CAS number: 18282-10-5	Tin Oxide	<2

Additional Information: None

SECTION 4: First-aid measures

Description of first-aid measures

General notes:

Show this Safety Data Sheet to the doctor in attendance.

After inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. If respiratory symptoms develop or persist, seek medical advice/attention.

After skin contact:

Wash affected area with plenty of soap and water. Remove contaminated clothing and launder before reuse. If skin irritation develops or persists, seek medical advice/attention.

After eye contact:

Immediately rinse eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. If eye irritation develops or persists, seek medical advice/attention.

After ingestion:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention.

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not available.

Delayed symptoms and effects:

Not determined or not available.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not available.

Notes for the doctor:

Treat symptomatically.

SECTION 5: Fire-fighting measures

Extinguishing media

Suitable extinguishing media:

Water mist/fog, carbon dioxide, dry chemical or alcohol resistant foam.

Unsuitable extinguishing media:

Do not use water jet.

Specific hazards during fire-fighting:

Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.10.2023

Page 3 of 12

Metallic Color Pigment - Emerald

Thermal decomposition may produce irritating/toxic fumes/gases.

Special protective equipment for firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA).

Special precautions:

Avoid contact with skin, eyes, hair and clothing. Do not breathe fumes/gas/mists/aerosols/vapors/dusts. Move containers from fire area if safe to do so. Use water spray/fog for cooling fire exposed containers. Avoid unnecessary run-off of extinguishing media which may cause pollution.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

Methods and material for containment and cleaning up:

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Reference to other sections:

For personal protective equipment see Section 8. For disposal see Section 13.

SECTION 7: Handling and storage

Precautions for safe handling:

Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

Conditions for safe storage, including any incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Alberta	Titanium Dioxide	13463-67-7	8-Hour TWA: 10 mg/m ³
	Chromium (III) Oxide	1308-38-9	8-Hour TWA: 0.5 mg/m ³ (Chromium, metal and Cr III compounds, as Cr)

Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.10.2023

Page 4 of 12

Metallic Color Pigment - Emerald

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Tin Oxide	18282-10-5	8-Hour TWA: 2 mg/m ³ (Tin, oxide and inorganic compounds, as Sn)
	Fluorphlogopite	12003-38-2	8-Hour TWA: 2.5 mg/m ³ (Fluoride, as F)
British Columbia	Titanium Dioxide	13463-67-7	8-Hour TWA: 10 mg/m ³ (total dust)
	Titanium Dioxide	13463-67-7	8-Hour TWA: 3 mg/m ³ (respirable fraction)
	Chromium (III) Oxide	1308-38-9	8-Hour TWA: 0.5 mg/m ³ (Chromium (III) inorganic compounds, as Cr, Total)
	Tin Oxide	18282-10-5	8-Hour TWA: 2 mg/m ³ (Tin, oxide and inorganic compounds, as Sn)
	Fluorphlogopite	12003-38-2	8-Hour TWA: 1 mg/m ³ (Aluminum metal and insoluble compounds, respirable)
	Fluorphlogopite	12003-38-2	8-Hour TWA: 2.5 mg/m ³ (Fluoride, as F)
Manitoba	Titanium Dioxide	13463-67-7	8-Hour TWA: 2.5 mg/m ³ (finescale particles, respirable fraction)
	Titanium Dioxide	13463-67-7	8-Hour TWA: 0.2 mg/m ³ (nanoscale particles, respirable fraction)
	Chromium (III) Oxide	1308-38-9	8-Hour TWA: 0.003 mg/m ³ (Trivalent chromium water soluble inorganic compounds, including Chromite ore processing, as Cr (III), inhalable fraction)
	Tin Oxide	18282-10-5	8-Hour TWA: 2 mg/m ³ (Tin, oxide and inorganic compounds, as Sn)
	Fluorphlogopite	12003-38-2	8-Hour TWA: 1 mg/m ³ (Aluminum metal and insoluble compounds, respirable fraction)
	Fluorphlogopite	12003-38-2	8-Hour TWA: 2.5 mg/m ³ (Fluoride, as F)
Ontario	Titanium Dioxide	13463-67-7	8-Hour TWA: 10 mg/m ³
	Chromium (III) Oxide	1308-38-9	8-Hour TWA: 0.5 mg/m ³ (Chromium, metal and inorganic Cr III compounds, as Cr)
	Tin Oxide	18282-10-5	8-Hour TWA: 2 mg/m ³ (Tin, oxide and inorganic compounds, as Sn)
	Fluorphlogopite	12003-38-2	8-Hour TWA: 1 mg/m ³ (Aluminum metal and insoluble compounds, respirable fraction)
	Fluorphlogopite	12003-38-2	8-Hour TWA: 2.5 mg/m ³ (Fluoride, as F)

Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.10.2023

Page 5 of 12

Metallic Color Pigment - Emerald

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Quebec	Titanium Dioxide	13463-67-7	8-Hour TWA: 10 mg/m ³ (total dust)
	Chromium (III) Oxide	1308-38-9	8-Hour TWA: 0.5 mg/m ³ (Chromium III compounds, as Cr)
	Tin Oxide	18282-10-5	8-Hour TWA: 2 mg/m ³ (Tin, oxide and inorganic compounds, as Sn)
	Fluorphlogopite	12003-38-2	8-Hour TWA: 5 mg/m ³ (Aluminum metal and insoluble compounds, respirable dust)
	Fluorphlogopite	12003-38-2	8-Hour TWA: 2.5 mg/m ³ (Fluoride, as F)
Saskatchewan	Titanium Dioxide	13463-67-7	8-Hour Contamination Limit: 10 mg/m ³
	Titanium Dioxide	13463-67-7	15-Minute Contamination Limit: 20 mg/m ³
	Chromium (III) Oxide	1308-38-9	8-Hour Contamination Limit: 0.5 mg/m ³ (Chromium, Metal and Cr (III) compounds)
	Chromium (III) Oxide	1308-38-9	15-Minute STEL: 1.5 mg/m ³ (Chromium, Metal and Cr (III) compounds)
	Tin Oxide	18282-10-5	8-Hour Contamination Limit: 2 mg/m ³ (Tin, oxide and inorganic compounds, as Sn)
	Tin Oxide	18282-10-5	15-Minute Contamination Limit: 4 mg/m ³ (Tin, oxide and inorganic compounds, as Sn)
	Fluorphlogopite	12003-38-2	8-Hour Contamination Limit: 10 mg/m ³ (Metal dust and compounds, as Al)
	Fluorphlogopite	12003-38-2	15-Minute Contamination Limit: 20 mg/m ³ (Metal dust and compounds, as Al)
New Brunswick	Titanium Dioxide	13463-67-7	8-Hour TWA: 10 mg/m ³
	Chromium (III) Oxide	1308-38-9	8-Hour TWA: 0.5 mg/m ³ (Chromium (III) Compounds, as Cr)
	Tin Oxide	18282-10-5	8-Hour TWA: 2 mg/m ³ (Tin, oxide and inorganic compounds, as Sn)
	Fluorphlogopite	12003-38-2	8-Hour TWA: 1 mg/m ³ (Aluminum metal and insoluble compounds, respirable fraction)
	Fluorphlogopite	12003-38-2	8-Hour TWA: 2.5 mg/m ³ (Fluoride, as F)

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Not determined or not applicable.

Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.10.2023

Page 6 of 12

Metallic Color Pigment - Emerald

Appropriate engineering controls:

Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Personal protection equipment

Eye and face protection:

Safety glasses or goggles. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Skin and body protection:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory protection:

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn.

General hygienic measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance (physical state, color):	Powder
Odor:	Odourless
Odor threshold:	Not determined or not available.
pH-value:	6.0-9.0 (4% H ₂ O)
Melting/Freezing point:	Decomposes
Boiling point/range:	Not determined or not available.
Flash point:	Not determined or not available.
Evaporation rate:	Not determined or not available.
Flammability (solid, gaseous):	Not determined or not available.
Explosion limit upper:	Not determined or not available.
Explosion limit lower:	Not determined or not available.
Vapor pressure:	Not determined or not available.
Vapor density:	Not determined or not available.
Density:	2.8-3.2 kg/L
Relative density:	Not determined or not available.
Solubilities:	Insoluble
Partition coefficient (n-octanol/water):	Not determined or not available.

Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.10.2023

Page 7 of 12

Metallic Color Pigment - Emerald

Auto/Self-ignition temperature:	Not determined or not available.
Decomposition temperature:	Not determined or not available.
Dynamic viscosity:	Not determined or not available.
Kinematic viscosity:	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

Particle size	10-100 µm
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SECTION 10: Stability and reactivity

Reactivity:

Not reactive under recommended handling and storage conditions.

Chemical stability:

Stable under recommended handling and storage conditions.

Possibility of hazardous reactions:

Hazardous reactions are not anticipated under recommended conditions of handling and storage.

Conditions to avoid:

Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Incompatible materials:

None known.

Hazardous decomposition products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Route	Result
Titanium Dioxide	oral	LD50 Rat: > 2000 mg/kg
	inhalation	LC50 Rat: 5.09 mg/L (4 hr [aerosol])
Chromium (III) Oxide	oral	LD50 Rat: > 5000 mg/kg
	inhalation	LC50 Rat: > 5.41 mg/L (4 hr [aerosol])
Tin Oxide	oral	LD50 Rat: >2000 mg/kg
	inhalation	LC50 Rat: >2.04 mg/L (4 hr - Aerosol)
Fluorophlogopite	oral	LD50 Rat: >9000 mg/kg
	inhalation	LC50 Rat: > 5 mg/L (4 h [dusts/mists])

Skin corrosion/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.10.2023

Page 8 of 12

Metallic Color Pigment - Emerald

Serious eye damage/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Species	Result
Titanium Dioxide	Not applicable.	Airborne, unbound particles of respirable size are known to cause cancer.

International Agency for Research on Cancer (IARC):

Name	Classification
Titanium Dioxide	Group 2B
Chromium (III) Oxide	Group 3
Fluorophlogopite	Not Applicable

National Toxicology Program (NTP):

Name	Classification
Titanium Dioxide	Not Applicable
Chromium (III) Oxide	Not Applicable
Fluorophlogopite	Not Applicable

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data:

Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.10.2023

Page 9 of 12

Metallic Color Pigment - Emerald

Name	Result
Tin Oxide	May cause respiratory irritation.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data:

Name	Result
Tin Oxide	Repeated and/or prolonged exposure may cause Stannosis (benign pneumoconiosis): dyspnea (breathing difficulty), decreased pulmonary function

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Information on likely routes of exposure:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

Other information:

No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
Titanium Dioxide	Aquatic Invertebrates EC50 Daphnia magna: > 100 mg/L (48 hr [mobility])
	Aquatic Plants EC50 Raphidocelis subcapitata: > 100 mg/L (72 hr [growth rate])
Chromium (III) Oxide	Fish LC50 Danio rerio: > 10,000 mg/L (96 hr)
	Aquatic Plants EC50 Desmodesmus subspicatus: 0.148 mg/L (72 hr [growth rate])
Tin Oxide	Aquatic Plants EC50 Algae: >100 mg/L (72 hr [growth rate])
	Fish LC50 Oncorhynchus mykiss: >100 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: >100 mg/L (48 hr [mobility])

Chronic (long-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.10.2023

Page 10 of 12

Metallic Color Pigment - Emerald

Name	Result
Titanium Dioxide	Aquatic Plants NOEC Raphidocelis subcapitata: ≥ 100 mg/L (72 hr [growth rate])
Chromium (III) Oxide	Aquatic Invertebrates NOEC Daphnia magna: ≥ 0.014 mg/L (21 d [reproduction])
	Aquatic Plants NOEC Danio rerio: ≥ 0.018 mg/L (30 d [time to hatch])

Persistence and degradability

Product data: No data available.

Substance data:

Name	Result
Titanium Dioxide	Persistence assessment based on biodegradability is not relevant for metals and its inorganic compounds such as this substance.
Chromium (III) Oxide	Persistence assessment based on biodegradability is not relevant for metals and their inorganic compounds such as this substance.

Bioaccumulative potential

Product data: No data available.

Substance data:

Name	Result
Titanium Dioxide	Bioaccumulation assessment using a classic BCF assessment is not considered relevant for essential elements/metals such as this substance.
Chromium (III) Oxide	Bioaccumulation assessment using a classic BCF assessment is not considered relevant for essential elements/metals such as this substance.

Mobility in soil

Product data: No data available.

Substance data:

Name	Result
Titanium Dioxide	Mobility in soil assessment based on KOC/Kd values are not relevant for metals and its inorganic compounds such as this substance.
Chromium (III) Oxide	Mobility in soil assessment based on KOC/Kd values are not relevant for metals and their inorganic compounds such as this substance.

Results of PBT and vPvB assessment

Product data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT.

vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

Substance data:

PBT assessment:

Titanium Dioxide	PBT assessment not applicable to inorganic substances such as this one.
Chromium (III) Oxide	PBT assessment does not apply to metals and their inorganic compounds such as this substance.
Tin Oxide	The substance is not PBT.

vPvB assessment:

Titanium Dioxide	vPvB assessment not applicable to inorganic substances such as this one.
Chromium (III) Oxide	vPvB assessment does not apply to metals and their inorganic compounds such as this substance.

Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.10.2023

Page 11 of 12

Metallic Color Pigment - Emerald

Tin Oxide	The substance is not vBvB.
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Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

Contaminated packages:

Not determined or not applicable.

SECTION 14: Transport information

Canadian Transportation of Dangerous Goods (TDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Bulk Name	None
Ship type	None
Pollution category	None

Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.10.2023

Page 12 of 12

Metallic Color Pigment - Emerald

SECTION 15: Regulatory information

Canada regulations

Domestic substances list (DSL): All ingredients are listed or exempt.

Non-domestic substances list (NDSL): None of the ingredients are listed.

Additional information: Not determined.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with the Canadian Hazardous Products Regulations and WHMIS 2015. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

Initial preparation date: 04.10.2023

End of Safety Data Sheet