Safety Data Sheet

1 Identification of the substance and the supplier

Product Identification Mr. #7114-1200 (SF286)

Product Code W1011GE019

Manufacturer's name : GSI CREOS CORPORATION

Address : 2-3-1, KUDAN-MINAMI, CHIYODA-KU, TOKYO, JAPAN

Business Group in Charge : HOBBY DEPT.

Contact Person : MANAGER OF HOBBY DEPT.

Phone and facsimile number for information : 03-5211-1805

Emergency Contact : 03-5211-1805

Classification of Product : Acrylic Coating

General Use : Coating for Plastics

Date prepared : 01/Mar/2015

2 Hazards identification

[GHS Classification]		[Classification categories]	[Hazard statements]
Flammable liquid		Category 2	Highly flammable liquid and vapor
Acute toxicity Oral Dermal		Not Categorized	
		Not Categorized	
	Inhalation : Gas	Not Classifiable	
	Inhalation : Vapor	Category 3	Toxic if inhaled
	Inhalation : Dust and Mist	Category 4	Harmful if inhaled
Skin corro	sion/Irritation	Category 2	Causes skin irritation
Eye damag	ge/Eye irritation	Category 2	Causes serious eye irritation
Respiratory S	Sensitization Solid/Liquid	Not Categorized	
	Gas	Not Classifiable	
Skin Sensi	tization	Not Categorized	
Germ Cell	Mutagenicity	Category 1B	
Carcinoger	nicity	Category 2	Suspected of causing cancer
Reproductive toxicity		Category 1	May damage fertility or the unborn child
Effects on or via lactation		Not Classifiable	
Specific Target Organ/Systemic Toxicity (Single Exposure)		Category 2	May cause damage to organs
			(Central nervous system)
l oxicity (S	oingle Exposure)	Category 3	May cause respiratory irritation
			May cause drowsiness and dizziness
		Category 1	Causes damage to organs through prolonged or repeated exposure
	arget Organ/Systemic		(Neural systems)
Toxicity (Sepeated Exposure)		Category 2	May cause damage to organs through prolonged or repeated exposure
			(Liver,Central nervous system,Peripheral nervous system,Auditory organ)
Aspiration		Not Categorized	
Hazard to the	aquatic environment (Acute)	Not Categorized	
	aquatic environment (Chronic)	Not Categorized	
Hazard to the ozone layer		Not Classifiable	

[Symbol]







Skull and crossbones

Health Hazard

[Signal Word]

Danger

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[Precautionary Statement]

May be harmful in contact with skin, inhalation or ingestion.

- 1. Keep away from ignition sources and secure ventilation to work area.
- 2. Secure ventilation during coating and/or drying to avoid inhalation of vapor and/or mist.
- 3. Wear protective gloves, eye/face protection and long sleeved clothes to avoid skin contact.
- 4. If spilled or leaked, wipe with cloth and discard contaminated materials into a container which is filled with water.
- 5. Dip contaminated cloth, spray dust and/or mist into water until they are discarded properly.
- 6. Wash hands an gargle mouth thoroughly after handling.
- 7. Do not use this product other than the purpose specified by the manufacturer/supplier.
- 8. If feel unwell because of inhalation, remove to fresh air and keep at rest in a position comfortable for breathing, and call a physician.
- 9. If in eyes, rinse cautiously with water for several minutes and get medical attention. If swallowed, call a physician immediately.
- 10. If on skin, wash with plenty of soap and water, and get medical attention.
- 11. Wash off stains from clothes.
- 12. Extinguish fire with CO2 gas, foam and/or dry chemical extinguisher.
- 13. Close container tightly and store indoor and away from heat and rain. Protect from sunlight.
- 14. Keep reach out of children.
- 15. Content should be used up before disposal of container.
- 16. Container/content should be disposed in accordance with local, regional and national regulations.

3 Composition/Information on Ingredients

Single Substance • Mixture : Mixture

Hazardous Ingredients and Concentration

Chemical Name	CAS No.	Content (%)
2-Pentanone, 4-methyl-	108-10-1	20~30
Acetic acid ethyl ester	141-78-6	1~5
Acetic acid, butyl ester	123-86-4	5 ~ 10
2-Propanol, 1-methoxy-	107-98-2	1~5
Ethanol	64-17-5	1~5
Silicon dioxide	7631-86-9	1~5
Titanium oxide (TiO2)	13463-67-7	10~20
2-Butanone	78-93-3	1~5
1-Butanol	71-36-3	1~5
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	5 ~ 10

4 First-Aid measures

[If in Eyes]

•Wash eyes with plenty of water and in case of persistence of irritation, get medical attention.

[If on Skin]

•Wash with plenty of soap and water, and get medical attention immediately.

[If Inhaled]

•If feel unwell because of inhalation, remove to fresh air and keep at rest in a position comfortable for breathing, and call a physician.

[If Swallowed]

•Call a physician immediately.

5 Fire-Fighting measures

<u>Suitable extinguishing Water[] CO2[*] Foam[*] Dry chemical[*] Dry sand[*]</u>

Fire fighting method

- $\hbox{\bf •Wear proper protective clothes such as heat insulating clothes/gloves/face shield and/or eye protection.}$
- •Use specified extinguishing media.
- Remove combustible material from surrounding area.
- Start fire fighting from windward
- •Do not use water as the extinguishing media.

6 Accidental release measures

- •Avoid contact with skin. Wear appropriate protective equipment (protective gloves, eye/face protection, apron and long sleeved clothes) when handling spill of this product.
- •Wear protective equipment and collect spillage into air-tight container that can be tightly closed. Move the container to a safe place.
- Dispose contaminant and waste in accordance with regulations relative to disposal.
- •Eliminate all ignition sources such as heat, sparks, open flames and combustible materials.
- •Provide appropriate extinguisher to prepare for fire.
- •Do not use steel tools as it may cause impact sparks. Tool should be static free.
- Absorb with dry sand, earth or noncombustible material. In case of large spill, hold back with earth to prevent spreading.

•Avoid release to rivers to prevent effect to environment.

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Handling and storage

[Cautions on Handling]

- May cause poisoning if on skin or inhaled.
- Keep away from ignition sources such as heat/sparks/open flame, and ventilate work area when handling this product.
- •Ventilate work area to prevent inhalation of vapor/fume/spray/dust.
- Avoid contact with skin. Wear protective gloves, eye/face protection and long sleeved clothes if necessary.
- •If spilled or leaked, wipe with cloth and discard contaminated materials into a container which is filled with water.
- •Dip contaminated cloth, spray dust and/or mist into water until they are discarded properly.
- After use, wash hands and gargle mouth thoroughly.
- •Do not use this product other than the purpose specified by the manufacturer/supplier.

[Cautions on Storage]

- Keep container tightly closed. Store in cool and ventilated indoor place. Protect from direct sun light.
- •Keep reach out of children.
- •Keep away from flame or heat sources.

Exposure Controls/Personal Protection

[Facilities Recommendation]

- All facilities should be explosion proof.
- •Prevent vapor from retention by installation of a proper ventilator.
- Ground/bond container or receiving equipment for transportation, mixing and/or transferring of this product.
- •Do not locate heat/flame generating facilities close to the work area.
- If spray indoor, install coating facilities so that workers are protected from direct exposure to spray mist, or install adequate ventilation.
- For handling in closed tanks, install appropriate ventilator which secures ventilation to the bottom of the tank. [Protective Equipments]
- Respiratory Protection: Wear gas mask for organic gas. Wear self-contained breathing apparatus in case of operation in closed areas.
- Eye Protection: Wear goggle type of eye protection.
- Skin Protection: Wear appropriate gloves which is impervious to organic solvents and chemicals.
- •Other Protection: Work clothes specified by the manufacturer or supplier, and safety shoes.

Threshold Limit of Ingredient

Substance name	JOHSC	ACGIH(TLVs-TWA)	
2-Pentanone, 4-methyl-	50ppm 200mg/m3	20ppm	
Acetic acid ethyl ester	200ppm 720mg/m3	400ppm	
Acetic acid, butyl ester	100ppm 475mg/m3	150ppm	
2-Propanol, 1-methoxy-	No data available	100ppm	
Ethanol	No data available	1000ppm	
Silicon dioxide	No data available	$0.1 \mathrm{mg/m3}$	
Titanium oxide (TiO2)	No data available	10mg/m3	
2-Butanone	200ppm 590mg/m3	200ppm	
1-Butanol	50ppm(Max) 150mg/m3(Max)	20ppm	
2-Pentanone, 4-hydroxy-4-methyl-	No data available	50ppm	

* JOHSC: Japan Occupational Health Service Centre

Physical and Chemical Properties

Form Liquid[*] Gas[] Solid[] Color: WHITE Solubility: No data available

Explosion Limits: 1.2vol% Octanol-Water Odor: Solvent odor (Lower)

Partition Coefficient: No data available pH: Not Applicable 19.0vol% (Upper)

Melting Point: No data available Vapor Ignition Point: 270°C Boiling Point: 76.5°C Pressure: 12000Pa(20°C) Decomposition

Flash Point: 17.1°C Temperature: No data available Vapor Density: No data available

Density: $1.100 \pm 0.100 \text{g/cm}$ Other: None particular

10 Stability and Reactivity

[Reactivity Information]

·Materials to be avoided: Keep away from strong oxides and/or peroxides that will cause polymerization and/or generate heat or fire by mixing or contact.

- Hazardous thermal decomposition products: CO, CO2, HCl, vapors of solvents.
- Other reactivity information: None.

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11 Toxicological Information

Health Hazard Information on Ingredient Table 1

Health Hazard Information on Ingredient Table 1						
Substance name	Acute toxicity (LD50, LC50, etc.)					
Substance name	Oral	Dermal	Inhalation (Gas)	Inhalation (Vapor)	Inhalation (Dust, Mist)	
2-Pentanone, 4-methyl-	Not Categorized	Not Categorized	Not Applicable	Category 3	Not Classifiable	
2 Feritatione, 4 methyl	2080mg/kg	>16,000mg/kg		2000ppm		
Acetic acid ethyl ester	Not Categorized	Not Categorized	Not Applicable	Category 4	Not Classifiable	
Acetic acid ethyl estel	4940mg/kg	>18,000mg/kg		14640ppm		
Acetic acid, butyl ester	Not Categorized	Not Categorized	Not Applicable	Category 3	Category 3	
Acetic acid, butyl ester	14130mg/kg			2000ppm	0.74mg/l	
2-Propanol, 1-methoxy-	Not Categorized	Not Categorized	Not Applicable	Category 4	Not Classifiable	
2 1 Topation, 1 illethoxy	5200mg/kg	13000mg/kg		7395ppm		
Ethanol	Not Categorized	Not Categorized	Not Applicable	Not Categorized	Not Classifiable	
Ltrianor	>5、000mg/kg	>20,000mg/kg		20661ppm		
Silicon dioxide	Category 5	Not Classifiable	Not Applicable	Not Classifiable	Not Classifiable	
Silicon dioxide	3160mg/kg					
Titanium oxide (TiO2)	Not Categorized	Not Categorized	Not Applicable	Not Classifiable	Not Categorized	
Titaliidiii oxide (TiO2)						
2-Butanone	Not Categorized	Not Categorized	Not Applicable	Category 4	Not Classifiable	
2 Butanone	2483mg/kg	>5,000mg/kg		11700ppm		
1-Butanol	Category 4	Not Categorized	Not Applicable	Not Categorized	Not Classifiable	
Dutanoi	1227mg/kg	3636mg/kg				
2-Pentanone, 4-hydroxy-4-methyl-	Not Categorized	Not Categorized	Not Applicable	Not Classifiable	Not Classifiable	
2 i citatione, 4 hydroxy 4 illethyl	4000mg/kg	13500mg/kg				

Health Hazard Information on Ingredient Table 2

ard information on ingredient Table 2						
Substance name	Skin Corrosion Irritation	Serious Damage to Eyes /Eye Irritation	Respiratory Sensitization	Skin Sensitization	Germ Cell Mutagenicity	Carcinogenicity
2-Pentanone, 4-methyl-	Not Categorized	Category 2B	Not Classifiable	Not Categorized	Not Categorized	Category 2
Acetic acid ethyl ester	Not Categorized	Category 2B	Not Classifiable	Not Categorized	Not Categorized	Not Classifiable
Acetic acid, butyl ester	Not Categorized	Category 2B	Not Classifiable	Not Categorized	Not Classifiable	Not Classifiable
2-Propanol, 1-methoxy-	Not Categorized	Category 2B	Not Classifiable	Not Classifiable	Not Categorized	Not Categorized
Ethanol	Not Categorized	Category 2B	Not Classifiable	Not Classifiable	Category 1B	Not Classifiable
Silicon dioxide	Not Classifiable	Not Classifiable	Not Classifiable	Not Classifiable	Not Classifiable	Not Categorized
Titanium oxide (TiO2)	Not Categorized	Category 2B	Not Classifiable	Not Classifiable	Not Categorized	Category 2
2-Butanone	Category 2	Category 2B	Not Classifiable	Not Classifiable	Not Categorized	Not Categorized
1-Butanol	Category 2	Category 2A	Not Classifiable	Not Classifiable	Not Categorized	Not Categorized
2-Pentanone, 4-hydroxy-4-methyl-	Category 2	Category 2A	Not Classifiable	Not Classifiable	Not Classifiable	Not Classifiable

Health Hazard Information on Ingredient Table 3

zard information on ingredient Table 3		
Substance name	Reproductive toxicity	Specific Target Organ (Single Exposure)
2-Pentanone, 4-methyl-	Not Categorized	
Acetic acid ethyl ester	Not Classifiable	
Acetic acid, butyl ester	Not Classifiable	
2-Propanol, 1-methoxy-	Not Categorized	
Ethanol	Category 1A	
Silicon dioxide	Not Classifiable	Not Classifiable
Titanium oxide (TiO2)	Not Classifiable	Not Classifiable
2-Butanone	Not Categorized	
1-Butanol	Not Categorized	
2-Pentanone, 4-hydroxy-4-methyl-	Category 2	

Health Hazard Information of Ingredient Table 4

Substance name	Specific Target Organ (Repeat Exposure)	Aspiration Respiratory Toxicity
2-Pentanone, 4-methyl-		Not Classifiable
Acetic acid ethyl ester	Not Classifiable	Not Classifiable
Acetic acid, butyl ester	Not Classifiable	Not Classifiable
2-Propanol, 1-methoxy-	Not Categorized	Not Classifiable
Ethanol		Not Classifiable
Silicon dioxide	Not Classifiable	Not Classifiable
Titanium oxide (TiO2)	Not Classifiable	Not Classifiable
2-Butanone		Not Categorized
1-Butanol		Not Categorized
2-Pentanone, 4-hydroxy-4-methyl-	Not Classifiable	Not Classifiable

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12 Ecological information

Aqueous Milieu Hazard Information on Ingredient

Substance name	Hazardous to Aquatic Environment (Acute)	Hazardous to Aquatic Environment (Chronic)
2-Pentanone, 4-methyl-	Not Categorized	Not Categorized
Acetic acid ethyl ester	Not Categorized	Not Categorized
Acetic acid, butyl ester	Category 3	Not Categorized
2-Propanol, 1-methoxy-	Not Categorized	Not Categorized
Ethanol	Not Categorized	Not Categorized
Silicon dioxide	Not Classifiable	Not Classifiable
Titanium oxide (TiO2)	Not Classifiable	Not Classifiable
2-Butanone	Not Categorized	Not Categorized
1-Butanol	Not Categorized	Not Categorized
2-Pentanone, 4-hydroxy-4-methyl-	Not Categorized	Not Categorized

13 Disposal Considerations

- Content should be used up before disposal of container.
- · Container/content should be disposed in accordance with local, regional and national regulations.

14 Transport Information

General Information: Follow general instructions described in the "Precautions on Handling and Storage".

Transportation must be done in accordance with the appropriate regulations in case this

Ground Transportation: product falls under a category of regulations such as Fire Service Law (Japan), Industrial

Safety and Health Law (Japan), etc.

Marine Transportation: Comply stipulation of appropriate maritime regulations.

Air Transportation: Comply stipulations of appropriate air transportation regulations.

UN Number: 1263

15 Regulatory Information

Industrial Safety and Health Law (Japan) : Contains indicative/notifiable substance, Dangerous goods (Inflammable Liquid)

: 2nd Special chemical substances included.: Contains Category II organic solvent

Ordinance on Prevention of Organic

Solvent Poisoning

: Does not contain any categorized chemical substance.

Pollutant Release and Transfer Register Fire Service Law (Japan)

: 1st Petroleum Group in Class 4 Hazardous Materials, Hazard Class II

Ship Safety Law (Japan)

: Inflammable Liquid, Intermediate Flash Point Group

Aviation Law

: Inflammable Liquid

16 Other Information

[Bibliography]

- Guide Book for Preparation of MSDS and Labeling to Comply with GHS (Japan Paint Manufacturers Association)
- Model MSDS and Case Example of Labeling (Japan Paint Manufacturers Association)
- Raw Material Data Base (Japan Paint Manufacturers Association)
- Globally Harmonized System of Classification and Labeling of Chemicals (Communications Conference of GHS related Ministries and Agencies)
- Chemical Risk Information Platform (National Institute of Technology and Evaluation)

Japan Advanced Information Centre of Safety

(Japan Industrial Safety and Health Association)

- International Programme on Chemical Safety (IPCS)
- International Chemical Safety Cards (ICSC)
- ·Handbook on Risk Preventive First Aids
- Pocket Book on Solvents

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