Safety Data Sheet according to Regulation (EC) No.1907/2006 <Annex II REACH>

1 Identification of the substance and the supplier

1	Identification of the substand	ce and the supp	lier	
	Product Identification	B-502 Mr. Product Code	TOPCOAT SEMI-GLOSS	(AEROSOL)
	Manufacturer's name Address Business Group in Charge Phone and facsimile number f Emergency Contact Classification of Product General Use Date prepared	for information	GSI Creos Corporation 3-1, Kudanminami 2-chome, Chiyoda-ku, Hobby Dept. Tel: +81-03-5211-1805 Fax: +81-03-5211 GSI Europe-Import + Export GmbH Louise-Dumont-Str. 31, 40211 Düsseldorf, Acrylic Coating Coating for Plastics 01/May/2015	1902
2	Hazards identification			
	Classification of the substand Classification ((EC) No 1272/2008)	
	Flam. Aerosol Cathegory 1 Acute Toxity Cathegory 4 Acute Toxity Cathegory 4 Skin Irritation, Cathegory 2 Eye Damage, Cathegory 1 Acute Toxity Cathegory 4 Specific target organ toxicity exposure, Cathegory 3 Specific target organ toxicity exposure, Cathegory 3	- single	H222: Extremely flammable aerosol H302: Harmful if swallowed H312: Harmful in contact with skin H315: Causes skin irritation H318: Causes serious eye damage H332: Harmful if inhaled H335: May cause respiratory irritation H336: May cause drowsiness or dizziness	
Classification (67/548EEC, 1999/45/EC)				
	Highly Flammable Harmful Irritant Irritant		R12: Extremely flammable R20/21/22: Harmful by inhalation, in contac R37/38: Irritating to respiratory system and R41: Risk of serious damage to eyes R67: Vapours may cause drowsiness and d	skin
	Labelling elements Labelling (Reg	ulation (EC) No	1272/2008)	
	Hazardous pictograms	•		
	Signal word		Danger	
	Hazard Statements		H222: Extremely flammable aerosol H229: Pressurized container: may burst if h H302: Harmful if swallowed H312: Harmful in contact with skin H315: Causes skin irritation H318: Causes serious eye damage H332: Harmful if inhaled H335: May cause respiratory irritation H336: May cause drowsiness or dizziness	eated
	Precautionary statements		Prevention P102: Keep out of reach of children P210: Keep away from heat, hot surfaces, s P280: Wear protective gloves/protective clo	parks, open flames and other ignition sources. No smoking. thing/eye protection/face protection

Reaction:

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. continue rinsing.

Hazardous components which must be listed on the label: CAS 111-76-2 2-Butoxvethanol

CAS 78-83-1 2-Methylpropan-	-1-ol

Other hazards

Further information

3 Composition/Information on Ingredients Mixtures

Mixture of solvents in aerosol can

Chemical Name	CAS-No.	EC No.	Registration Number		Classification (REGULA- TION (EC) No. 1272/2008	Conc.(wt%)
1-Methoxy-2-propanol	107-98-2	203-539-1	01- 2119457435- 35-XXXX	R10	Flam. Liq. 3; H226 STOT SE 3; H336	1-5
2-Methylpropan-1-ol	78-83-1	201-148-0	01- 2119484609- 23-XXXX	R10 Xi; R37/38, 41 R67	Flam. Liq. 3; H226 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335 STOT SE 3; H336	1-5
Propan-2-ol	67-63-0	200-661-7	01- 2119457558- 25-XXXX	F; R11 Xi; R36 R67	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	10-20
Ethanol	64-17-5	200-578-6	01- 2119457610- 43-XXXX	F; R11	Flam. Liq. 2; H225	1-5
2-Butoxyethanol	111-76-2	203-905-0	01- 2119475108- 36-XXXX	Xn; R 20/21/22, 36/38	Acute Tox. 4; H312 Acute Tox. 4; H332 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Irrit. 2; H319	1-5
Dimethyl ether	115-10-6	204-065-8	01- 2119472128- 37-XXXX	F+; R12	Press.Gas Flam. Gas 1; H220	50-60

For the full text of the R-phrases mentioned in this section, see section 16.

For the full text of the H-statements mentioned in this section, see section 16.

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
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Suitable extinguishing media Water[]	CO2[*]	Foam[*]	Dry chemical[*]	Dry sand[*]
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Fire fighting method

· 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. Tools 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.

7 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.

8 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.

	_	Exposure Limit Value				
	-	Short Term Eig		Eigh	ht Hours	
			AGS&DFG		AGS&DFG	
Substance	CAS No.	EU	Germany	EU	Germany	
1-Methoxypropan-2-ol	107-98-2	150PPM	200PPM	100PPM	100PPM	
2-Methylpropan-1-ol	78-83-1		100PPM		100PPM	
Propan-2-ol	67-63-0		400PPM		200PPM	
Ethanol	64-17-5		1000PPM		500PPM	
2-Butoxyethanol	111-76-2	50PPM	A/D)80/20PPN	20PPM	A/D)20/10PPM	
Dimethyl ether	115-10-6		8000PPM	1000PPM	1000PPM	

9 Physical and Chemical Properties

Dhysical appearance

Color: Colorless/Clear	Form: Aerosol/Liquid	Odor:	Product-specific
Additional data			
Change of state:	Pressure of gas is immediately ejected gas. Sprayed solvents e	evapora	te quickly.
Boiling point/ range:	N.A.(Not applicable)		
Flash point:	N.A.		
Flammability:	Spray and evaporative gases are extremely flammable		
Ignition temperature:	N.A.		
Auto ignition:	No		
Oxidizing properties:	The case of overheating		
Explosion danger:	Overheading rupture/bursting of the container formation of expl	osive m	nixtures are possible.
Explosion limits:	N.A.		

Vapour pressure inside the dispenser: Density, here: apparent density at 20°C: Solubility in water: Solvent content: More details:

at 50°C maximum 2/3 of maximum pressure allowed for the dispenser

0.850g/cm3

Yes 30-50%

The finished preparation in the aerosol dispenser only upon the addition of the pressurized gas. Details are in the hermetically sealed under pressure not measurable container.

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.

11 Toxicological Information

Health Hazard Information on Ingredient Table 1

Substance name		Acute to	cicity (LD50, LO	C50, etc.)	
Substance flame	Oral	Dermal	Inhalation (Gas)	Inhalation (Vapor)	Inhalation (Dust, Mist)
Silicon dioxide	Category 5	Not Classifiable	Not Applicable	Not Classifiable	Not Classifiable
	3160mg/kg				
2-Propanol, 1-methoxy-	Not Categorized	Not Categorized	Not Applicable	Not Classifiable	Not Classifiable
	5113mg/kg				
isobutyl alcohol	Category 5	Category 5	Not Applicable	Not Categorized	Not Classifiable
	2596mg/kg	2523mg/kg			
2-Propanol	Category 5	Category 5	Not Applicable	Not Categorized	Not Classifiable
	3437mg/kg	4059mg/kg			
Ethanol	Not Categorized	Not Classifiable	Not Applicable	Not Categorized	Not Categorized
Ethanor	> 5000mg/kg				
Ethanol, 2-butoxy-	Category 4	Category 2	Not Applicable	Category 2	Not Classifiable
	1746mg/kg	135mg/kg		450ppm	

Health Hazard Information on Ingredient Table 2

Substance name	Skin Corrosion • Irritation	Serious Damage to Eyes /Eye Irritation	Respiratory Sensitization	Skin Sensitization	Germ Cell Mutagenicity	Carcinogenicity
Silicon dioxide	Not Classifiable	Not Classifiable	Not Classifiable	Not Classifiable	Not Classifiable	Not Categorized
2-Propanol, 1-methoxy-	Category 3	Category 2A-2B	Not Classifiable	Not Classifiable	Not Categorized	Not Classifiable
isobutyl alcohol	Category 2	Category 2A	Not Classifiable	Not Classifiable	Not Categorized	Not Classifiable
2-Propanol	Not Categorized	Category 2A-2B	Not Classifiable	Not Classifiable	Not Categorized	Not Categorized
Ethanol	Not Categorized	Category 2A-2B	Not Classifiable	Not Classifiable	Category 1B	Not Categorized
Ethanol, 2-butoxy-	Category 2	Category 2A	Not Classifiable	Not Categorized	Not Categorized	Not Categorized

Health Hazard Information on Ingredient Table 3

Substance name	Reproductive toxicity	Specific Target Organ (Single Exposure)
Silicon dioxide	Not Classifiable	Not Classifiable
2-Propanol, 1-methoxy-	Not Categorized	Category 3(Narcotic action)
isobutyl alcohol	Not Categorized	Category 3(Respiratory tract irritation, Narcotic action)
2-Propanol	Category 2	Category 1(Central nervous system, Kidney, Systemic toxicology) Category 3(Respiratory tract irritation)
Ethanol	Category 1A	Category 3(Respiratory tract irritation, Narcotic action)
Ethanol, 2-butoxy-	Category 2	Category 1(Central nervous system, Blood, Kidney, Liver) Category 3(Respiratory tract irritation)

Health Hazard Information on Ingredient Table 4

Substance name	Specific Target Organ (Repeat Exposure)	Aspiration Respiratory Toxicity
Silicon dioxide	Not Classifiable	Not Classifiable
2-Propanol, 1-methoxy-	Not Categorized	Not Classifiable
isobutyl alcohol	Not Categorized	Category 2
2-Propanol	Category 2(Blood vessel, Liver, Spleen)	Category 2
Ethanol	Category 1(Liver) Category 2(Nerve)	Not Classifiable
Ethanol, 2-butoxy-	Category 2(Blood)	Not Applicable

12 Ecological information

Aqueous Milieu Hazard Information on Ingredient

	Hazardous to Aquatic Environment Hazardous to Aquatic Environ		
Substance name	(Acute)	(Chronic)	
Silicon dioxide	Not Classifiable	Not Classifiable	
2-Propanol, 1-methoxy-	Not Categorized	Not Categorized	
isobutyl alcohol	Not Categorized	Not Categorized	
2-Propanol	Not Categorized	Not Categorized	
Ethanol	Not Categorized	Not Categorized	
Ethanol, 2-butoxy-	Category 2	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: Ground Transportation:	Follow general instructions described in the "Precautions on Handling and Storage". Transportation must be done in accordance with the appropriate regulations in case this product falls under a category of regulations such as Fire Service Law (Japan), Industrial Safety and Health
Marine Transportation: Air Transportation: UN Number:	Law (Japan), etc. Comply stipulation of appropriate maritime regulations. Comply stipulations of appropriate air transportation regulations. 1950

15 Regulatory Information

Particular hazards associated with the preparation and safety recommendations:

- 16 Other Information
 Full text risk of R-phrases referred to under sections 2 and 3: R10: Flammable
 R11: Highly flammable
 R12: Extremely flammable
 R20/21/22: Harmful by inhalation, in contact with skin and if swallowed
 R36/38: Irritating to eyes and skin
 R37/38: Irritating to respiratory system and skin
 R41: Risk of serious damage to eyes
 R67: Vapours may cause drowsiness and dizziness
 Full text risk of H-statemens referred to under sections 2 and 3: H220: Extremely flammable gas
 H220: Extremely flammable gas
 H222: Extremely flammable gas
 H222: Extremely flammable gas
 - H225: Highly flammable liquid and vapour
 - H226: Flammable liquid and vapour
 - H229: Pressurized container: may burst if heated
 - H302: Harmful if swallowed
 - H312: Harmful in contact with skin
 - H315: Causes skin irritation
 - H318: Causes serious eye damage
 - H319: Causes serious eye irritation
 - H332: Harmful if inhaled
 - H335: May cause respiratory irritation
 - H336: May cause drowsiness or dizziness

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not 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 or in any process, unless specified in the text.

Parts of the Safety Data Sheet marked with red line have been updated.