

Safety Data Sheet

1 Identification of the substance and the supplier

Product Identification **B-516 Mr.SUPER CLEAR SEMI-GLOSS**
Product Code W1011GF010

Manufacturer's name : GSI Creos Corporation
Address : 3-1,Kudanminami 2-chome,Chiyoda-ku,Tokyo 102-0074,Japan
Business Group in Charge : HOBBY DEPT.
Phone and facsimile number for information : Tel; +81-03-5211-1805 Fax; +81-03-5211-1902
Emergency Contact : Tel;49-211-166594-0 / GSI Europe-Import+Export GmbH Friedrich-Ebert-Strasse
54-40210 Dusseldorf,Germany
Classification of Product : Acrylic Coating
General Use : Coating for Plastics
Date prepared : 19/Nov/2010

2 Symbol and R-phrases for Hazardous compounds in according with EC Directives 1999/45/EEC.

Preparation classification



Highly Flammable



Toxic

R Phrases

| | |
|-----------|---|
| R12 | Extremely flammable. |
| R20/21/22 | Harmful by inhalation, in contact with skin and if swallowed. |
| R36/37/38 | Irritating to eyes, respiratory system and skin. |
| R41 | Risk of serious damage to eyes. |
| R66 | Repeated exposure may cause skin dryness or cracking. |
| R67 | Vapours may cause drowsiness and dizziness. |

3 Composition/Information on Ingredients

Contains:

| Substance | CAS | Conc.(wt%) | EC No. | Classification | Risk Phrases |
|--|----------|------------|-----------|-----------------|-----------------------|
| butan-2-ol | 78-92-2 | 10-20 | 201-158-5 | Xi | R10, R36/37, R67 |
| 1-methoxy-2-propanol; monopropylene glycol | 107-98-2 | 1-5 | 203-539-1 | | R10, R67 |
| 4-methylpentan-2-one; isobutyl methyl ketone | 108-10-1 | 10-20 | 203-550-1 | F, Xn, Xi | R11, R20, R36/37, R66 |
| ethanol; ethyl alcohol | 64-17-5 | 1-5 | 200-578-6 | F | R11 |
| 2-methylpropan-1-ol; iso-butanol | 78-83-1 | 1-5 | 201-148-0 | Xi | R10, R37/38, R41, R67 |
| dibutyl phthalate; DBP | 84-74-2 | <1 | 201-557-4 | Repr. Cat. 2, I | R61, R50, R62 |
| dimethyl ether | 115-10-6 | 50-60 | 204-065-8 | F+ | R12 |
| 4-hydroxy-4-methylpentan-2-one; diacetone acrylate | 123-42-2 | 1-5 | 204-626-7 | Xi | R36 |
| n-butyl acetate | 123-86-4 | 1-5 | 204-658-1 | | R10, R66, R67 |
| 2-butoxyethanol; ethylene glycol monobutyl ether | 111-76-2 | 1-5 | 203-905-0 | Xn, Xi | R20/21/22, R36/38 |

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

Suitable extinguishing media: Water[] CO2[*] Foam[*] Dry chemical[*] Dry sand[*]

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. 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.

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.

| Substance | CAS No. | Exposure Limit Value | | | |
|--------------------------------|----------|----------------------|--------------------|-------------|--------------------|
| | | Short Term | | Eight Hours | |
| | | EU | AGS&DFG Germany | EU | AGS&DFG Germany |
| Butan-2-ol | 78-92-2 | | | | |
| 1-Methoxypropan-2-ol | 107-98-2 | 150PPM | 200PPM | 100PPM | 100PPM |
| 4-Methylpentan-2-one | 108-10-1 | | 40PPM | 20PPM | 20PPM |
| Ethanol | 64-17-5 | | 1000PPM | | 500PPM |
| 2-Methylpropan-1-ol | 78-83-1 | | 100PPM | | 100PPM |
| Di-n-butyl phthalate | 84-74-2 | | 0.5PPM | | 0.1PPM |
| Dimethyl ether | 115-10-6 | | 8000PPM | 1000PPM | 1000PPM |
| 4-Hydroxy-4-methylpentan-2-one | 123-42-2 | | 40PPM | | 20PPM |
| n-Butyl acetate | 123-86-4 | | 200PPM | | 100PPM |

9 Physical and Chemical Properties

| | | |
|----------------------------------|-----------------------------------|--------------------------------|
| Form Liquid[*] Gas[] Solid[] | Color: Clear | Solubility: No data available |
| Odor: Solvent odor | Explosion Limits: 0.5vol% (Lower) | Octanol-Water Partition |
| pH: Not Applicable | 19.0vol% (Upper) | Coefficient: No data available |
| Melting Point: No data available | Vapor | Ignition Point: 204°C |
| Boiling Point: 78.3°C | Pressure: 12000Pa(20°C) | Decomposition |
| Flash Point: 21.4°C | Vapor Density: No data available | Temperature: No data available |
| | Density: 0.74~0.76g/cm3 | 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.

11 Toxicological Information

Health Hazard Information on Ingredient Table 1

| Substance name | Acute toxicity (LD50, LC50, etc.) | | | | |
|---|-----------------------------------|------------------|------------------|--------------------|-------------------------|
| | Oral | Dermal | Inhalation (Gas) | Inhalation (Vapor) | Inhalation (Dust, Mist) |
| Silicon dioxide | Category 5 | Not Classifiable | Not Applicable | Not Classifiable | Not Classifiable |
| | 3160mg/kg | | | | |
| 2-Butanol | Category 5 | Not Categorized | Not Applicable | Not Classifiable | Not Classifiable |
| | 2200mg/kg | | | | |
| 2-Propanol, 1-methoxy- | Not Categorized | Not Categorized | Not Applicable | Not Classifiable | Not Classifiable |
| | 5113mg/kg | | | | |
| 2-Pentanone, 4-methyl- | Category 5 | Category 5 | Not Applicable | Category 3 | Not Classifiable |
| | 2919mg/kg | 3000mg/kg | | 2000ppm | |
| Ethanol | Not Categorized | Not Classifiable | Not Applicable | Not Categorized | Not Categorized |
| | > 5000mg/kg | | | | |
| isobutyl alcohol | Category 5 | Category 5 | Not Applicable | Not Categorized | Not Classifiable |
| | 2596mg/kg | 2523mg/kg | | | |
| 1,2-Benzenedicarboxylic acid, dibutyl ester | Not Categorized | Not Categorized | Not Applicable | Not Classifiable | Not Categorized |
| | 6300mg/kg | | | | |
| 2-Pentanone, 4-hydroxy-4-methyl- | Category 5 | Not Categorized | Not Applicable | Not Classifiable | Not Classifiable |
| | 4000mg/kg | | | | |
| Acetic acid, butyl ester | Not Categorized | Not Categorized | Not Applicable | Category 3 | Category 4 |

| | | | | | |
|--------------------------|-------------------------|------------------------|----------------|----------------------|------------------|
| Acetic acid, butyl ester | 14130mg/kg | | | 2000ppm | 1.85mg/l |
| Ethanol, 2-butoxy- | Category 4 1746mg/kg | Category 2 135mg/kg | Not Applicable | Category 2 450ppm | Not Classifiable |

| 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-Butanol | Not Categorized | Category 2A | Not Classifiable | Not Classifiable | Not Classifiable | Not Classifiable |
| 2-Propanol, 1-methoxy- | Category 3 | Category 2A-2B | Not Classifiable | Not Classifiable | Not Categorized | Not Classifiable |
| 2-Pentanone, 4-methyl- | Not Categorized | Not Categorized | Not Classifiable | Not Categorized | Not Categorized | Not Categorized |
| Ethanol | Not Categorized | Category 2A-2B | Not Classifiable | Not Classifiable | Category 1B | Not Categorized |
| isobutyl alcohol | Category 2 | Category 2A | Not Classifiable | Not Classifiable | Not Categorized | Not Classifiable |
| 1,2-Benzenedicarboxylic acid, dibutyl ester | Category 3 | Category 2B | Not Classifiable | Category 1 | Not Categorized | Not Categorized |
| 2-Pentanone, 4-hydroxy-4-methyl- | Category 2 | Category 2A | Not Classifiable | Not Classifiable | Not Classifiable | Not Classifiable |
| Acetic acid, butyl ester | Category 3 | Category 2B | Not Categorized | Not Classifiable | Not Classifiable | Not Classifiable |
| Ethanol, 2-butoxy- | Category 2 | Category 2A | Not Classifiable | Not Categorized | Not Categorized | Not Categorized |

| Substance name | Reproductive toxicity | Specific Target Organ (Single Exposure) |
|---|-----------------------|---|
| Silicon dioxide | Not Classifiable | Not Classifiable |
| 2-Butanol | Category 2 | Category 3(Respiratory tract irritation, Narcotic action) |
| 2-Propanol, 1-methoxy- | Not Categorized | Category 3(Narcotic action) |
| 2-Pentanone, 4-methyl- | Not Categorized | Category 3(Respiratory tract irritation, Narcotic action) |
| Ethanol | Category 1A | Category 3(Respiratory tract irritation, Narcotic action) |
| isobutyl alcohol | Not Categorized | Category 3(Respiratory tract irritation, Narcotic action) |
| 1,2-Benzenedicarboxylic acid, dibutyl ester | Category 2 | Category 1(Kidney, Neural systems) Category 3(Respiratory tract irritation) |
| 2-Pentanone, 4-hydroxy-4-methyl- | Category 2 | Category 1(Respiratory system) Category 2(Liver) Category 3(Narcotic action) |
| Acetic acid, butyl ester | Not Categorized | Category 1(Central nervous system) Category 2(Lung) Category 3(Respiratory tract irritation) |
| Ethanol, 2-butoxy- | Category 2 | Category 1(Central nervous system, Blood, Kidney, Liver) Category 3(Respiratory tract irritation) |

| Substance name | Specific Target Organ (Repeat Exposure) | Aspiration/Respiratory Toxicity |
|---|---|---------------------------------|
| Silicon dioxide | Not Classifiable | Not Classifiable |
| 2-Butanol | Not Classifiable | Not Classifiable |
| 2-Propanol, 1-methoxy- | Not Categorized | Not Classifiable |
| 2-Pentanone, 4-methyl- | Category 1(Systemic toxicology) | Category 2 |
| Ethanol | Category 1(Liver) Category 2(Nerve) | Not Classifiable |
| isobutyl alcohol | Not Categorized | Category 2 |
| 1,2-Benzenedicarboxylic acid, dibutyl ester | Category 1(Organ of respiration) Category 2(Sperm, Liver) | Not Classifiable |
| 2-Pentanone, 4-hydroxy-4-methyl- | Category 1(Kidney) | Not Classifiable |
| Acetic acid, butyl ester | Not Classifiable | Not Classifiable |
| Ethanol, 2-butoxy- | Category 2(Blood) | Not Applicable |

12 Ecological information

Aqueous Milieu Hazard Information on Ingredient

| Substance name | Hazardous to Aquatic Environment (Acute) | Hazardous to Aquatic Environment (Chronic) |
|---|--|--|
| Silicon dioxide | Not Classifiable | Not Classifiable |
| 2-Butanol | Not Categorized | Not Categorized |
| 2-Propanol, 1-methoxy- | Not Categorized | Not Categorized |
| 2-Pentanone, 4-methyl- | Not Categorized | Not Categorized |
| Ethanol | Not Categorized | Not Categorized |
| isobutyl alcohol | Not Categorized | Not Categorized |
| 1,2-Benzenedicarboxylic acid, dibutyl ester | Category 1 | Not Categorized |
| 2-Pentanone, 4-hydroxy-4-methyl- | Not Categorized | Not Categorized |
| Acetic acid, butyl ester | Category 3 | 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: Follow general instructions described in the "Precautions on Handling and Storage".
Ground Transportation: Transportation must be done in accordance with the appropriate regulations in case this product falls under a
Marine Transportation: Comply stipulation of appropriate maritime regulations.
Air Transportation: Comply stipulations of appropriate air transportation regulations.
UN Number: 1950

15 Regulatory Information

Particular hazards associated with the preparation and safety recommendations:



Highly Flammable



Toxic

Compounds

dibutyl phthalate

R Phrases

R12 Extremely flammable.
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R36/37/38 Irritating to eyes, respiratory system and skin.
R41 Risk of serious damage to eyes.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.

S Phrases

S2 Keep out of the reach of children.
S7/9 Keep container tightly closed and in a well-ventilated place
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S29 Do not empty into drains.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
S46 If swallowed, seek medical advice immediately and show this container or label

16 Other Information

Full text risk phrases appearing in section 3:

R10 Flammable.
R11 Highly flammable.
R12 Extremely flammable.
R20 Harmful by inhalation.
R36 Irritating to eyes.
R41 Risk of serious damage to eyes.
R50 Very toxic to aquatic organisms.
R61 May cause harm to the unborn child.
R62 Possible risk of impaired fertility.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.
R36/37 Irritating to eyes and respiratory system.
R36/38 Irritating to eyes and skin.
R37/38 Irritating to respiratory system and skin.
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.