

SDS

Safety Data Sheet



3F., No. 287, Niupu Rd., Xiangshan Dist.,
Hsinchu City 300, Taiwan (R.O.C.)

Phrozen Resin
ABS like Resin- Creamy White

Tel | 886-3-540-0076 E-mail | Ray.wu@phrozen3d.com Website | <http://www.phrozen3d.com>

Product Name	Phrozen ABS like Resin- Creamy White
Synonyms	-
Chemical Name	Mixture of Acrylate, Photoinitiator, and Pigment
Type	Liquid
Application	UV/Visible Light curable resin for 3D printing
Manufacturers	普羅森科技股份有限公司 Phrozen Tech Co. Ltd. +8865400076 3F., No. 287, Niupu Rd.,, HSIN CHU CITY 30091, , Taiwan, China Ray.wu@phrozen3d.com
Emergency Phone	+886916781577 Local police number



Irritant

1. COMPOSITION/INFORMATION ON INGREDIENTS

Substance Name	% by weight	CAS No / EC No./ EC Index
(1-methyl-1,2-ethanediyl)bis([oxy(methyl-2,1-ethanediyl)] diacrylate	15~20%	42978-66-5 / 256-032-2 / 607-249-00-X
Hexamethylene diacrylate	20~30%	13048-33-4 / 235-921-9 / 607-109-00-8
Acrylate Oligomers	30~50%	55818-57-0/
Titanium dioxide/Pigment	0.1~2%	13463-67-7/
Phenyl bis(2,4,6-trimethyl benzoyl)phosphine oxide	1~4%	162881-26-7 / - / -
Additive	0~2%	63148-62-9

For full text of the R-Phrase(s) mentioned in this section, Please refer to Section 16.

2. HAZARDS IDENTIFICATION

Most important hazards Harmful if swallowed.
Irritating to eyes, respiratory system and skin.
May cause sensitization by skin contact.

3. FIRST AID MEASURES

Inhalation Keep at rest.

	Move to fresh air. Consult a physician.
Skin contact	Take off contaminated clothing and shoes immediately. Rinse immediately with plenty of water and seek medical advice
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.
Ingestion	Do not induce vomiting. Keep at rest. Consult a physician.

4.FIRE-FIGHTING MEASURES

Suitable extinguishing media :	Use dry chemical, carbon dioxide, water spray or alcohol resistant foam.
Extinguishing media which must not be used for safety reason	High volume water jet
Specific hazards	Prevent product from entering drains. Possible decomposition products are: COx, NOx
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.

5.ACCIDENTAL RELEASE MEASURES

Personal Precautions	See also Section 8. Ensure adequate ventilation. Wear personal protective equipment. Remove all sources of ignition. Avoid contact with skin and eyes. Do not breathe vapors or spray mist.
Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Shovel into suitable container for disposal. After cleaning, flush away traces with water.

6.HANDLING AND STORAGE

Storage	Keep tightly closed in a dry, cool and well-ventilated place. (@25°C) Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Keep away from sources of ignition - No smoking.
Handling	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Use only in well-ventilated areas. No information available

Specific use(s)

7.EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment	
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. (filter type A)
Hand protection	Protective gloves (EN 374) Nitrile rubber
Eye protection	Goggles (EN 166)
Hygiene measures	Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice.

8.PHYSICAL AND CHEMICAL PROPERTIES

General information	
Appearance	Liquid
Color	Refer to product label
odour	Characteristic
Important health, safety and environmental information	
pH	Not applicable
Boiling point/boiling range	No data available
Melting point/melting range	No data available
Flash point	> 110 °C

Evaporation rate	< 1
Vapour density	> 1
Autoignition temperature	No data available
Oxidising properties	Not applicable
Vapour pressure	No data available
Relative density	1.11
Water solubility	Insoluble
Explosion limits	No data available
Viscosity	80~100 cp (@25°C)
Partition coefficient (n-octanol/water)	No data available

9. STABILITY AND REACTIVITY

Stability	Stable at normal conditions
Conditions to avoid	Keep away from heat ,sources of ignition
Materials to avoid	Incompatible with strong acids and oxidising agents
Hazardous decomposition products	COx, VOC

10. TOXICOLOGICAL INFORMATION

Acute toxicity	Acrylate Monomers: > 5000 mg/kg Photoinitiators: > 2000 mg/kg
Inhalation	Irritating to respiratory system.
Skin contact	May cause sensitisation by skin contact. Repeated contact may cause allergic reactions in very susceptible persons. Irritating to skin.
Eye contact	Irritating to eyes.
Ingestion	Harmful if swallowed.
Chronic toxicity	May cause sensitisation by skin contact.

11. ECOLOGICAL INFORMATION

Bioaccumulation	No data is available on the product itself.
Ecotoxicity effects	(1-methyl-1,2-ethanediyl)bis([oxy(methyl-2,1-ethanediyl)] diacrylate : LC50/96h/fish : 4,5mg/l - 10mg/l (Leuciscus idus) (1-methyl-1,2-ethanediyl)bis([oxy(methyl-2,1-ethanediyl)] diacrylate : EC50/48h/daphnia : 88,7mg/l (Daphnia magna) (1-methyl-1,2-ethanediyl)bis([oxy(methyl-2,1-ethanediyl)] diacrylate : EC50/72h/algae : >28mg/l (Scenedesmus subspicatus)
Ecotoxicity effects	Photoinitiators: LC50/96h >0.09-1mg/l Photoinitiators: EC50/48h/Daphnia >1.175-10mg/l Photoinitiators: IC50/72h/Algae >0.26-1mg/l
Mobility	Insoluble
Persistence and degradability	No data is available on the product itself.

12. DISPOSAL CONSIDERATION

Waste from residues Dispose of in accordance with local regulations

13. TRANSPORT INFORMATION

Class

ADR/RID

UN-No	Not applicable
Proper shipping name	Not applicable
Class	Not applicable
Packing group	Not applicable

IMDG

UN-No	Not applicable
Class	Not applicable
Packing group	Not applicable
Proper shipping name	Not applicable

ICAO/IATA

It is not subject to current regulations for transportation of hazardous goods. (IMDG)

UN-No	Not applicable
Class	Not applicable
Packing group	Not applicable
Proper shipping name	Not applicable

14. REGULATORY INFORMATION

Labeling The preparation is classified as dangerous in accordance with Directive 1999/45/EC.

Symbol(s) Xi-Irritant

R-phrase(s) -R22- Harmful if swallowed.

R36/38 – Irritating to eyes and skin.

R36/37/38 – Irritating to eyes, respiratory system and skin.

R43-May cause sensitization by skin contact.

S37- Wear suitable gloves.

S-phrase(s)

15. OTHER INFORMATION

Text of R phrases mentioned in Section 2

R22– Harmful if swallowed.

R36/38 – Irritating to eyes and skin.

R37/38 – Irritating to eyes, respiratory system and skin.

R43 – May cause sensitization by skin contact.

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Sources of key data used to compile the data sheet

Contents and format of this MSDS are in accordance with EEC Commission Directive 2001/58/EC, 1999/45/EC, 67/548/EC.

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