



# Material Safety Data Sheet

## Phrozen ABS like Resin- Creamy White

### Sec. 1: Product and Company Identification

Product Name	Phrozen ABS like Resin- <b>Creamy White</b>
Synonyms	-
Chemical Name	Mixture of Acrylate, Photoinitiator, and Pigment
Type	Liquid
Application	<b>UV/Visible Light curable resin for 3D printing</b>
Manufacturers	普羅森科技股份有限公司 Phrozen Tech Co. Ltd. +8863-5302273 # 35 No.2, Ln. 496, Niupu S. Rd., Xiangshan Dist., Hsinchu City 300, Taiwan (R.O.C.) <a href="mailto:phrozen.dlp@gmail.com">phrozen.dlp@gmail.com</a>
Emergency Phone	+886916781577 Local police number



Irritant

### 1. IDENTIFICATION/COMPOSITION/INFORMATION ON INGREDIENTS

2. (methyl-1,2-ethanediyl)

Bis [oxy(methyl-2,1-	15~20%	42978-66-5/256-032-2/607-249-00-X
Ethanediy diacrylate		
Hexamethylene diacrylate	20~35%	13048-33-4/235-921-9/607-109-00-8
Acrylate Oligomers	30~40%	-
Titanium dioxide	0.5~2%	13463-67-7
Phenyl bis(2,4,6-trimethyl benzoyl)phosphine oxide	1~4%	162881-26-7 / - / -
Additive	0~2%	-

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

### 3. HAZARDS IDENTIFICATION

**Most important hazards**

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

**4. FIRST AID MEASURES**

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

**5. FIRE-FIGHTING MEASURES**

<b>Suitable extinguishing media :</b>	Use dry chemical, carbon dioxide, water spray or alcohol resistant foam.
<b>Extinguishing media which must not be used for safety reason</b>	High volume water jet
<b>Specific hazards</b>	Prevent product from entering drains. Possible decomposition products are: CO <sub>x</sub> , NO <sub>x</sub>
<b>Special protective equipment for firefighters</b>	Wear self-contained breathing apparatus and protective suit.

**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions</b>	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.
<b>Methods for cleaning up</b>	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.

**7. HANDLING AND STORAGE**

<b>Storage</b>	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.
<b>Handling</b>	Keep away from sources of ignition - No smoking. 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.
<b>Specific use(s)</b>	No information available

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Personal protective equipment**

**Respiratory protection**

**Hand protection**

**Eye protection**

**Hygiene measures**

In case of insufficient ventilation, wear suitable respiratory equipment. (filter type A)

Protective gloves (EN 374)

Nitrile rubber

Goggles (EN 166)

Ensure adequate ventilation.

Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**General information**

**Appearance**

Liquid

**Color**

Refer to product label

**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**

~70 cp (@25°C)

**Partition coefficient (n-octanol/water)**

No data available

## 10. 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

## 11. 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.

## 12. ECOLOGICAL INFORMATION

<b>Bioaccumulation</b>	No data is available on the product itself.
<b>Ecotoxicity effects</b>	(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)
<b>Ecotoxicity effects</b>	Photoinitiators: LC50/96h >0.09-1mg/l Photoinitiators: EC50/48h/Daphnia >1.175-10mg/l Photoinitiators: IC50/72h/Algae >0.26-1mg/l
<b>Mobility</b>	Insoluble
<b>Persistence and degradability</b>	No data is available on the product itself.

## 13. DISPOSAL CONSIDERATION

<b>Waste from residues</b>	Dispose of in accordance with local regulations
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## 14. TRANSPORT INFORMATION

**Class**

**ADR/RID**

<b>UN-No</b>	Not applicable
<b>Proper shipping name</b>	Not applicable
<b>Class</b>	Not applicable
<b>Packing group</b>	Not applicable

**IMDG**

<b>UN-No</b>	Not applicable
<b>Class</b>	Not applicable
<b>Packing group</b>	Not applicable
<b>Proper shipping name</b>	Not applicable

**ICAO/IATA**

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

<b>UN-No</b>	Not applicable
<b>Class</b>	Not applicable
<b>Packing group</b>	Not applicable

**Proper shipping name**

Not applicable

## 15. REGULATORY INFORMATION

<b>Labeling</b>	The preparation is classified as dangerous in accordance with Directive 1999/45/EC.
<b>Symbol(s)</b>	Xi - Irritant
<b>R-phrase(s)</b>	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.
<b>S-phrase(s)</b>	S37 - Wear suitable gloves.

## 16. OTHER INFORMATION

<b>17. Text of R phrases mentioned in Section 2</b>	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.
<b>Sources of key data used to compile the data sheet</b>	European Chemicals Bureau

The 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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