

SAFETY DATA SHEET

Phrozen Wash Resin Cleaner

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SECTION 1 : IDENTIFICATION**1.1 Product identifier****Product name** Phrozen Wash Resin Cleaner**Recommended use and restrictions on use****Recommended use** For use in Phrozen 3D-printers**Restrictions on use** Do not use in the situation that easily generate aerosol, steam.**1.2 Name, address and phone of manufacturer , importers or supplier****Manufacturer** Phrozen Tech Co., Ltd. 287 Niupu Rd, Xiangshan Dist,
Hsinchu City 30091, TAIWAN(R.O.C)**Phone** +886-3621-0505**Emergency phone / Fax** +886-3621-0505 / +886-3539-6591**SECTION 2 : HAZARD IDENTIFICATION****2.1 Hazard classification**

Serious eye damage/eye irritation Category 2

2.2 Signal statement

Exclamation mark

**2.3 Pictograms****2.4 Signal word** Warning**2.5 Hazard statements**

Causes serious eye irritation

2.6 Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read carefully and follow all instructions.

Wear protective gloves, Wash thoroughly after handling.

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists, get medical advice/attention.

2.7 Other hazard

None

SECTION 3 : COMPOSITION / INFORMATION ON INGREDIENTS

Components	CAS number	Weight %	Classification acc. to GHS
2-(2-butoxyethoxy)ethanol	112-34-5	25~50%	Eye Dam. 2 / H319
Additives1	Trade Secret	5~10%	Eye Dam. 2 / H319
Water	7732-18-5	20~40%	-

SECTION 4 : FIRST AID MEASURES**4.1. First-aid advice and recommendations for different routes of exposure****4.1.1 Inhalation**

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

4.1.2 Skin Contact

Wash with plenty of soap and water.

4.1.3 Eyes Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.

4.1.4 Ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting

4.2. Most important symptoms and hazardous effects

None

4.3. Protection of First-aid personnel

None

4.4. Note for physician

None

SECTION 5 : FIRE-FIGHTING MEASURES**5.1 Applicable extinguishing media**

Water spray, BC-powder, Carbon dioxide (CO₂)

5.2 Specific hazards confronted during fire fighting

Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Specific fire-fighting procedure

None

5.4 Specific protective equipments for fire-fighters

For fires in enclosed areas, wear self-contained breathing apparatus and protective suit.

Do not inhale combustion gases.

SECTION 6 : ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions**

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.

6.2. Environmental precautions

Do not flush into surface water.

6.3. Cleaning methods

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.

SECTION 7 : SAFETY HANDLING AND STORAGE**7.1. Handling**

Handle in accordance with good industrial hygiene and safety practice.

Avoid contact with eyes. Avoid prolonged repeated skin contact.

Use in well-ventilated area away from all ignition sources.

Switch off all electrical devices such as parabolic heaters, hotplates, storage heaters etc. in

good time for them to have cooled down before commencing work.

Do not smoke; do not weld. Do not empty waste into sanitary drains.

Take measures to prevent the build up of electrostatic charge.

7.2. Storage

Keep tightly closed in a dry, cool and well-ventilated place. (e.g. 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.

SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Engineering controls

Provide adequate ventilation to the areas where the product is stored and/or handled.

8.2. Control Parameters

Components	TWA	STEL	CEILING	BEI s
Titanium dioxide	10mg / m ³	15mg /m ³	-	-

8.3. Personal protective equipment

8.3.1 Respiratory protection

In case of inadequate ventilation wear respiratory protection.

8.3.2 Hand protection

Chemical protection gloves are suitable, which are tested according to EN 374.

For example : NBR: acrylonitrile-butadiene rubber

Material thickness : $\geq 0.6\text{mm}$

Breakthrough times of the glove material : > 120 minutes (permeation: level 4)

8.3.3 Eye protection

Use safety goggles.

8.3.4 Skin protection

Use clothing that provides complete protection to the skin.

8.4. Hygiene measures

Ensure adequate ventilation.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Apperance and color	Clear viscous liquid	Odor	Typical acrylate
Odor threshold	N/A	Melting point	N/A
pH value	N/A	Boiling point	100 °C at 1,013 hPa
Flammable	N/A	Flash point	>93°C
Decomposition Temp	N/A	Testing method	N/A
Natural Temp	210°C	Explosive limit	N/A
Vapor pressure	32 hPa at 25 °C	Vapor density	N/A
Density	0.96 g /cm ³	Solubility	N/A
Octanol/water distribution coefficient (log Kow)	N/A	Evaporaion rate	N/A

SECTION 10: STABILITY AND REACTIVITY**10.1. Stability**

Stable under normal condition.

10.2. Possible hazardous reation under specific conditions

None

10.3. Must avoid condition

UV-radiation/sunlight.

10.4. Must avoid substances

Oxidisers, Reducing agents

10.5. Hazardous decomposed product

None

SECTION 11: TOXICOLOGICAL INFORMATION**Information on toxicological effects**

Test data are not available for the complete mixture.

11.1. Exposure paths

None

11.2. Symptoms

None

11.3. Acute toxicity

Components	route	Species	End point	Value
Diethylene glycol monobutyl ether	Oral	Rat	LD50	2410 mg/kg
	Dermal	Rabbit	LD50	2,700 mg/kg
Naxionate	Ingestion	Rabbit	LD50	>7000 mg/kg
	Dermal	Rabbit	LD50	>2000 mg/kg
	Oral	Rat	LC50	>6.41 mg/l/4h

SECTION 12: ECOLOGICAL INFORMATION

The product has not been tested. The statement has been derived from the properties of the individual components.

12.1. Ecological toxicity

Aquatic toxicity (acute) of components of the mixture				
Components	End point	Value	Species	Exposure time
Diethylene glycol monobutyl ether	LC50	1300mg/l	fish	96 h
	EC50	>100mg/l	aquatic invertebrates	48 h
	ErC50	>100mg/l	algae	72h

12.2. Persistence and degradability

Degradability of components of the mixture				
Components	Process	Degradation rate	Time	Source
Diethylene glycol monobutyl ether	aerobic	85%	28d	ECHA
Naxionate	aerobic	83 - 85%	28d	ECHA

12.3. Bio-accumulative potential

Components	BCF	Log kow	BOD/COD
Diethylene glycol monobutyl ether	3		

12.4. Mobility in soil

None

12.5. Other adverse effects

None

SECTION 13: DISPOSAL CONSIDERATIONS**13.1. Waste disposal methods**

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

13.2. Sewage disposal method

Do not empty into drains. Avoid release to the environment.

13.3. Contaminated Packaging disposal method

Handle contaminated packages in the same way as the substance itself.

SECTION 14: TRANSPORT INFORMATION

Land transport USDOT	Not classified as dangerous goods under transport regulations.
Sea transport IMDG	Not classified as dangerous goods under transport regulations.
Air transport IATA/ICAO	Not classified as dangerous goods under transport regulations.
Further information	N/A
Other requirements	N/A

SECTION 15: REGULATORY INFORMATION**15.1. List of substances subject to authorisation (REACH, Annex XIV) / SVHC- candidate list**

None of the ingredients are listed

15.2. Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

None of the ingredients are listed

15.3. Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

None of the ingredients are listed

15.4. Regulation on persistent organic pollutants (POP)

None of the ingredients are listed.

15.5. National inventories

Country	Inventory	Status
AU	AU AICS	all ingredients are listed
CA	DSL	all ingredients are listed
CA	NDSL	all ingredients are listed
CN	IECSC	all ingredients are listed
EU	ECSI	all ingredients are listed
EU	REACH Reg.	all ingredients are listed
JP	CSCL-ENCS	all ingredients are listed
JP	ISHA-ENCS	not all ingredients are listed
NZ	NZIoC	all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed
US	TSCA	all ingredients are listed

Legend

AIIC	Australian Inventory of Industrial Chemicals
DSL	Domestic Substances List (DSL)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
EU	EC Substance Inventory (EINECS, ELINCS, NLP)
EU	REACH registered substances
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
ISHA-ENCS	Inventory of Existing and New Chemical Substances (ISHA-ENCS)



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NZIoC	New Zealand Inventory of Chemicals
CICR	Chemical Inventory and Control Regulation
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

SECTION 16: OTHER INFORMATION

Reference	US OSHA HCS 29 CFR 1910.1200 / ECHA / REACH
Table formulation unit	Name : Phrozen Tech. Co. Ltd
	Address / Phone : 287 Niupu Rd, Xiangshan Dist, Hsinchu City 30091, TAIWAN(R.O.C) /+ 886-3-6210505
Table formulator	Job title : Occupational Safety & Health manager Name : Chun-Yao, Kuo
Table formulation Date	2024.06.17
Remarks	In the above described information, the symbol "N/A" means no relevant information currently.

To the best of our knowledge the information contained herein is accurate. However, Phrozen Tech. Co. Ltd. makes no warranty, expressed or implied, regarding the accuracy of these results to be obtained from the use thereof. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Phrozen Tech. Co. Ltd. assumes no responsibility for injury from the use of the product described herein.

END OF SAFETY DATASHEET