

SAFETY DATA SHEET

Xmas Special Resin - Elf Green

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SECTION 1 : IDENTIFICATION

1.1 Product identifier

Product name Xmas Special Resin - Elf Green

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

Skin corrosion/irritation Category 2 , Serious eye damage/eye irritation Category 2A ,
Skin sensitization Category 1 , Carcinogenicity Category 2 ,
STOT-Single exposure Category 3 , Chronic Aquatic hazard Category 3

2.2 Signal statement

Exclamation mark, Health hazard



2.3 Pictograms

2.4 Signal word WARNING

2.5 Hazard statements

Harmful if swallowed

Causes skin irritation

Causes serious eye irritation

May cause an allergic skin reaction

2.6 Precautionary statements

Wear protective gloves/protective clothing/eye protection/face protection.



IF ON SKIN: Wash with plenty of soap and water.

Take of contaminated clothing and wash before re-use.

If skin irritation occurs, seek medical advice/attention.

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. Wash hands after handling.

Dispose of contents/container to hazardous or special waste collection point.

2.7 Other hazard

None

SECTION 3 : COMPOSITION / INFORMATION ON INGREDIENTS

Components	CAS number	Weight %	Classification acc. to GHS
Acrylated Oligomer	264888-31-5	20- 40%	Skin Irrit. 2 / H315 Skin Sens. 1 / H317 Eye Dam. 2/ H319
Acrylate Monomers 1	48145-04-6	15- 30%	Skin Corr./Irrit. 2 /H315 Eye Dam./Irrit. 2A / H319 STOT SE 3 / H335 Aquatic Acute 2 / H401 Aquatic Chronic 2 / H411
Acrylate Monomers 2	64401-02-1	10- 20%	Skin Irrit. 2 / H315 Skin Sens. 1 / H317 Eye Dam. 2/ H319 STOT SE 3 / H335
Additives1	Trade Secret	1- 5%	Skin Irrit. 2 / H315 Skin Sens. 1 / H317 Eye Dam. 2/ H319 Repr. 2 / H360FD STOT SE 3 / H373 Aquatic Acute 2 / H401 Aquatic Chronic 2 / H411
Additives2	Trade Secret	3- 7%	Skin Sens. 1 / H317

			Repr. 2 / H360FD Aquatic Acute 2 / H401 Aquatic Chronic 2 / H411
Additives3	Trade Secret	1- 4%	Skin Sens. 1 / H317 Repr. 2 / H360FD Aquatic Acute 2 / H401 Aquatic Chronic 2/ H411
Additives4	Trade Secret	0.1- 2%	-
Additives5	Trade Secret	<0.05%	-

SECTION 4 : FIRST AID MEASURES

4.1 First-aid advice and recommendations for different routes of exposure :

4.1.1. Inhalation

Keep at rest. Move to fresh air. Consult a physician.

4.1.2. Skin Contact

Take off contaminated clothing and shoes immediately.

Rinse immediately with plenty of water and seek medical advice

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

Do not induce vomiting. Keep at rest. Consult a physician.

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

Nitrogen oxides (NO_x), 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

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder. Covering of drains.

Place in appropriate containers for disposal. Ventilate affected area.

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

None

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.

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.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Apperance and color	Elf Green viscous liquid	Odor	Typical acrylate
Odor threshold	N/A	Melting point	N/A
pH value	N/A	Boiling point	N/A
Flammable	N/A	Flash point Testing method	>110°C close up
Decomposition Temp	N/A		
Natural Temp	N/A	Explosive limit	N/A
Vapor pressure	N/A	Vapor density	N/A
Density	1.12 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, Free radical initiators.

10.5. Hazardous decomposed product

CO_x, NO_x, VOCs

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
2-Propenoic acid 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester	Oral	Rat	LD50	> 5,000 mg/kg
	Oral	Rabbit	LD50	5170 mg/kg
Diphenyl(2,4,6-trimethyl benzoyl) phosphine oxide	Ingestion	Rat	LD50	> 5,000 mg/kg
	Dermal	Rat	LD50	> 2,000 mg/kg

11.4. Chronic toxicity

None

SECTION 12: ECOLOGICAL INFORMATION

12.1. Ecological toxicity

End point	Value	Species	Exposure time	Source
LC50	1.47 mg/l	fish	95h	DIN 38412
LC50	19.9mg/l	aquatic invertebrates	48h	DIN 38412
EC50	4.86 mg/l	Algae	96 h	DIN 38412

12.2. Persistence and degradability

None

12.3. Bio-accumulative potential

None

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

Additional information for IMDG CODE 3.4.1 :

According to the general provisions 2.10.2.7, if the volume of the product is less than 5L or the mass is less than 5kg when transported, and the packaging complies with the general provisions in 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8, the product is not regarded as dangerous goods transportation.

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	not all ingredients are listed
JP	ISHA-ENCS	not all ingredients are listed
NZ	NZIoC	all ingredients are listed
TR	CICR	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)

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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)
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 /REACH /ECHA
Table formulation unit	Name : Phrozen Tech. Co. Ltd
	Address / Phone : 287 Niupu Rd, Xiangshan Dist, Hsinchu City 30091, TAIWAN(R.O.C) /+886-3621-0505
Table formulator	Job title : Occupational Safety & Health manager Name : Chun-Yao, Kuo
Table formulation Date	2023.11.15
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