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## SECTION 1 : IDENTIFICATION

Product identifier

Product name: Standard Series Resin - Neon-Lemon

### 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.

### 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

### Hazard classification :

Acute toxicity: oral Category 5, Skin corrosion/irritation Category 2, Serious eye damage/eye irritation Category 1, Skin sensitization Category 1 STOT-Repeated exposure Category 2, Chronic Aquatic hazard Category 3 Signal statement : Corrosion, Exclamation mark, Health hazard



Pictograms :

Signal word :DangerHazard statements :May be harmful if swallowedCauses skin irritationCauses serious eye irritationMay cause an allergic skin reactionMay cause damage to organsHarmful to aquatic life with long lasting effects



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Precautionary statements:	Avoid breathing dust/fume/gas/mist/vapours/spray.
	Wash thoroughly after handling.
	Contaminated work clothing should not be allowed out of the workplace.
	Do not breathe dust/fume/gas/mist/vapours/spray.
	Avoid release to the environment.
	Wear protective gloves/protective clothing/eye protection/face protection.
	IF SWALLOWED: Get medical help.
	IF ON SKIN: Wash with plenty water
	IF IN EYES: Rinse cautiously with water for several minutes.
	Remove contact lenses, If present and easy to do. Continue rinsing.
	Immediately call a POISON CENTER/doctor.
	Dispose of contents/container to hazardous or special waste collection point.
,	Take off contaminated clothing and wash it before reuse.

other hazard :

# SECTION 3 : COMPOSITION / INFORMATION ON INGREDIENTS

None

Components	CAS number	Weight %
Dipropylene Glycol Diacrylate	57472-68-1	20~50%
4,4'-isopropylidenediphenol-, polymer with (chloro methyl)oxirane, acrylate	55818-57-0	10~30%
Glycerol propoxylate (1PO/OH) triacrylate	52408-84-1	5~20%
Ethylene glycol phenyl ether acrylate	48145-04-6	1~10%
Poly(tetrahydrofuran)	25190-06-1	1~6%
(Di-p-tolylphosphoryl)(mesityl)methanone	270586-78-2	0.5~2%
1-Dodecyl-2-Pyrrolidinone	2687-96-9	0.05~0.2%



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## SECTION 4 : FIRST AID MEASURES

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

**Inhalation:** If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician. **Skin Contact :** 

Wash off immediately with soap and plenty of water.

If skin irritation persists, call a physician.

If on skin, rinse well with water.

If on clothes, remove clothes.

#### Eyes Contact :

Immediately flush eye(s) with plenty of water.

Flush eyes with water as a precaution.

Remove contact lenses.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

**Ingestion :** Keep respiratory tract clear.

Most important symptoms and hazardous effecects :

Causes skin irritation.

May cause an allergic skin reaction.

Suspected of damaging the unborn child

Protection of First-aid personnel : N/A

Note for physician : N/A

## SECTION 5 : FIRE-FIGHTING MEASURES

Applicable extinguishing media : Water spray, BC-powder, Carbon dioxide (CO<sub>2</sub>)

Specific hazards confronted during fire fighting :

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

Specific fire-fighting procedure : N/A

### Specific protecttive equipments for fire-fighters:

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regula tions.



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## SECTION 6: ACCIDENTAL RELEASE MEASURES

#### Personal precations :

Evacuate personnel to safe areas. Use personal protective equipment. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Wear protective gloves/clothing and eye/face protection.

#### Environmental precations :

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform respective authorities.

#### 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

### Handling :

Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes.

Smoking, eating, and drinking should be prohibited in the application area.

Dispose of rinse water in accordance with local and national regulations.

Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory

disease should not be employed in any process in which this mixture is being used.

### Storage :

Original container, plastic containers with cover.

Take measures to prevent the build up of electrostatic charge.

Use explosion-proof equipment.

Keep container closed when not in use.

Store in original container. Keep containers tightly closed in a cool, well-ventilated place.

Keep away from sources of ignition, oxidizing agents, strongly alkaline and strongly acid materials to avoid exothermic reactions.

## SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering controls :** Provide adequate ventilation to the areas where the product is stored and/or handled.



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Control Parameters : N/A
Personal protective equipment :
Respiratory protection :
Use suitable breathing protection if workplace concentration requires.
Hand protection :
Solvent-resistant gloves (butyl-rubber)
Eye protection :
Goggles, Safety glasses.
Skin protection :
Use clothing that provides complete protection to the skin.
Hygiene measures :
Do not eat, drink and smoke in work areas.
Wash thoroughly after handling.
Keep clean of operation area.

Take off polluted clothing as soon as possible after work. The clothing can be re-wear only after washed in clean or discard.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Apperance and color : Neon-Lemon 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 : >110°C/230F
Decomposition Temp : N/A	Testing method : close cup
Natural Temp : N/A	Explosive limit : N/A
Vapor pressure : N/A	Vapor density : N/A
Density : 1.12 g/cm <sup>3</sup>	Solubility : Soluble in organic solvents
Octanol/water distribution coefficient (log Kow) : N/A	Evaporaion rate : N/A



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## SECTION 10: STABILITY AND REACTIVITY

**Stability :** Stable under normal condition.

Possible hazardous reation under specific conditions : Contact with acids and alkalis may release hydrogen.

Must avoid condition : High temperature, exposure to direct sun light.

Must avoid substances : Acids, Bases, Oxidizing agents

Hazardous decomposted product : N/A

## SECTION 11: TOXICOLOGICAL INFORMATION

Test data are not available for the complete mixture.

Exposure paths : N/A

Symptoms : N/A

Acute toxicity :

Components	route	Species	End point	Value
Glycerol propoxylate (1PO	Oral	Rat	LD50	> 2,000 mg/kg
/OH) triacrylate	Dermal	Rabbit	LD50	> 2,000 mg/kg
Ethylene glycol phenyl eth	Oral	Rat	LD50	5145mg/kg
er acrylate				

## Chronic toxicity : N/A

## SECTION 12: ECOLOGICAL INFORMATION

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

#### Ecological toxicity :

Aquatic toxicity (acute) of components of the mixture				
Components End point Value Species Exposure time				
Glycerol propoxylate (1PO/	LC50	5.74 mg/l	fish	96 h
OH) triacrylate	EC50	91.4mg/l	aquatic invertebrates	48 h
	ErC50	12.2mg/l	algae	72h



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Ethylene glycol phenyl ethe	LC50	2.7mg/l	fish	4days
r acrylate	EC50	158.3mg/l	aquatic invertebrates	48 h
	EC50	11.3 - 25.7mg/l	algae	72h

### Per sistence and degradability :

Degradability of components of the mixture				
Components Process Degradation rate Time Source				Source
Glycerol propoxylate (1PO/	aerobic	72 - 85 %	28d	OECD
OH) triacrylate				

### Bio-accumulative potential : N/A

Mobility in soil : N/A

Other adverse effects : N/A

## SECTION 13: DISPOSAL CONSIDERATIONS

### Waste disposal methods :

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

### Sewage disposal method :

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

## Contaminated Packaging disposal method :

Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. In accordance with local and national regulations.

# SECTION 14: TRANSPORT INFORMATION

UN No: N/A

UN Proper shipping name : N/A

Transportation hazard classification : N/A

Packing type : N/A

Ocean pollution (Y/N) : N/A

Specific transpotation way and precautions : N/A



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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

## Applicable regulaions / Laws :

1. Occupational Safety and Health Act	2. Hazardous Chemical Labeling and General
	Knowledge Rules
3. Hazardous Chemicals Evaluation and	4. Laboratory Methods in Workplace Monitoring
Classification Management Measures	
5.Standards of Permissible Exposure Limits at	6. Traffic Safety Regulation
Job Site	
7. Organic Solvent Poisoning Prevention Rules	8.Enterprice Wastes Storage Clearance
	Treatment Methods and Facility Standards

## United States regulations:

## TSCA inventory listing\*:

Components	CAS number	Weight %	Status
Dipropylene Glycol Diacrylate	57472-68-1	20~50%	Listed
4,4'-isopropylidenediphenol-, polymer	55818-57-0	10~30%	Listed



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with (chloromethyl)oxirane, acrylate			
Glycerol propoxylate (1PO/OH) triacr ylate	52408-84-1	5~20%	Listed
Ethylene glycol phenyl ether acrylate	48145-04-6	1~10%	Listed
Poly(tetrahydrofuran)	25190-06-1	1~6%	Listed
(Di-p-tolylphosphoryl)(mesityl)methan one	270586-78-2	0.5~2%	Listed
1-Dodecyl-2-Pyrrolidinone	2687-96-9	0.05~0.2%	Listed

\* All the components present in this product at concentrations equal to or greater than 0.1% are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

## Significant New Use Rule (TSCA Sec.5): Not listed.

Export notification under TSCA Sec.12(b): Not listed.

## SARA Sec.302 extremely hazardous substances:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Sec 302.

## SARA Sec.313 toxic chemicals:

Pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986, (SARA) and 40 CFR 372 Part 372, this product does not contain chemicals at levels greater or equal to 0.1wt% subject t o the reporting requirements under Section 313.

## CERCLA: Not listed.

## California Prop.65, Safe Drinking Water & Toxic Enforcement Act:

This product does not contain chemicals at levels greater or equal to 0.1wt% which are known to t he state of California to cause birth defects or other reproductive harm.

### European Union regulations:

#### **EINECS** listing:

Components	CAS number	Weight %	Status
Dipropylene Glycol Diacrylate	57472-68-1	20~50%	Listed
4,4'-isopropylidenediphenol-, polymer with (chloromethyl)oxirane, acrylate	55818-57-0	10~30%	Listed



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Glycerol propoxylate (1PO/OH) triacr ylate	52408-84-1	5~20%	Listed
Ethylene glycol phenyl ether acrylate	48145-04-6	1~10%	Listed
Poly(tetrahydrofuran)	25190-06-1	1~6%	Listed
(Di-p-tolylphosphoryl)(mesityl)methan one	270586-78-2	0.5~2%	Listed
1-Dodecyl-2-Pyrrolidinone	2687-96-9	0.05~0.2%	Listed

**REACH No.**: A registration number is not available for this substance as the annual tonnage does not requir e a registration or the registration is envisaged for a later registration deadline.

ESIS dangerous chemicals: Not listed.

# SECTION 16: OTHER INFORMATION

Reference	US OSHA HCS 29 CFR 1910.1200,OECD, REACH	
Table formulation	Name : Phrozen Tech. Co. Ltd	
unit	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	2023.9.6	
Date		
Remarks	In the above described information, the symbol "N/A" means no relevant infor	
	mation currently.	

To the best of our knowledge the information contained herein is accurate. However, Phrozen Tech. Co. Lt d. 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