

3D Printer Resin - DLP Firm

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**Revision No: 2** 

# Section 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name: 3D printer resin

Product code: Ultra Violet Light Curing DLP Firm

# 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of substance / mixture: Use in DLP 3D printers.

# 1.3. Details of the supplier of the safety data sheet

Company name: Photocentric Ltd

Cambridge

House

Oxney Road Peterborough

Cambridgeshire

PE1 5YW

England

Tel: +44 (0) 1733 349937

Email: info@photocentric.co.uk

### 1.4. Emergency telephone number

Emergency tel: +44 (0) 1733 349937 (office hrs only)

### **Section 2: Hazards identification**

### 2.1. Classification of the substance or mixture

Classification under CHIP: Xi: R37; Sens.: R43; -: R52/53

Classification under CLP: Aquatic Chronic 3: H412; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1A: H317 Most important adverse effects: Causes skin irritation. May cause an allergic skin reaction. Causes serious eye

irritation. Harmful to aquatic life with long lasting effects.

### 2.2. Label elements

Label elements under CLP:

Hazard statements: H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H412: Harmful to aquatic life with long lasting effects.

Signal words: Warning

Hazard pictograms: GHS07: Exclamation mark



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Precautionary statements: P261: Avoid breathing dust/fumes/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face

protection. P302+352: IF ON SKIN: Wash with plenty of water/.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P321: Specific treatment (see instructions on this label).

### 2.3. Other hazards

**PBT:** This product is not identified as a PBT/vPvB substance.

# Section 3: Composition/information on ingredients

### 3.2. Mixtures

# Hazardous ingredients:

# ACRYLATE OLIGOMER

EINECS	CAS	PBT / WEL	CLP Classification	Percent
PROPRIETARY	PROPRIETARY	- Eye Irrit. 2: H319; Skin Sens. 1: H317		30-50%
ACRYLATE MC	NOMER			
-	PROPRIETARY	-	Skin Irrit. 2: H315; Eye Irrit. 2: H319	10-30%
METHACRYLA <sup>-</sup>	TE MONOMER			
PROPRIETARY	PROPRIETARY	-	Skin Irrit. 2: H315; Eye Irrit. 2: H319	10-30%
ACRYLATE MC	NOMER			
PROPRIETARY	PROPRIETARY	-	Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317	3-10%
PHOTOINITIAT	OR			
-	PROPRIETARY	-	Eye Irrit. 2: H319; Skin Sens. 1A: H317; Aquatic Chronic 2: H411	1.5-3%
PHOTOINITIAT	OR			
PROPRIETARY	PROPRIETARY	-	Skin Sens. 1: H317; Repr. 2: H361f; Aquatic Chronic 2: H411	0.1-1%
ACRYLATE MC	NOMER			
PROPRIETARY	PROPRIETARY	-	Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317	0.1-1%

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# Section 4: First aid measures

### 4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash

immediately with plenty of soap and water.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a

doctor.

# 4.2. Most important symptoms and effects, both acute and delayed

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may

cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

# 4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: Eye bathing equipment should be available on the premises.

# Section 5: Fire-fighting measures

### 5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray

to cool containers.

# 5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** In combustion emits toxic fumes.

### 5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact

with skin and eyes.

# Section 6: Accidental release measures

# 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. If outside do not approach from

downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking

containers leak-side up to prevent the escape of liquid.

# 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

### 6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for

disposal by an appropriate method.

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#### 6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

### Section 7: Handling and storage

#### 7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.

Do not handle in a confined space. Avoid the formation or spread of mists in the air.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed. The floor of the storage

room must be impermeable to prevent the escape of liquids.

### 7.3. Specific end use(s)

Specific end use(s): No data available.

### Section 8: Exposure controls/personal protection

### 8.1. Control parameters

Workplace exposure limits: No data available.

### **DNEL/PNEC Values**

**DNEL / PNEC** No data available.

### 8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area. The floor of the storage room must be

impermeable to prevent the escape of liquids.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Protective gloves.

**Eye protection:** Safety glasses. Ensure eye bath is to hand.

Skin protection: Protective clothing.

# Section 9: Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

State: Liquid Colour: Various

Odour: Characteristic odour

Evaporation rate: Negligible.

Oxidising: No data available. Solubility in water: Slightly soluble

Also soluble in: Most organic solvents.

Viscosity: Low

Boiling point/range°C: >35 Melting point/range°C: No data available.

Flammability limits %: lower: No data available. **upper:** No data available.

Flash point°C: >93

[cont...]

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Part.coeff. n-octanol/water: No data available.

Autoflammability°C: No data available.

Vapour pressure: No data available.

Relative density: No data available.

pH: Not applicable.

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VOC g/I: Not applicable.

### 9.2. Other information

Other information: No data available.

# Section 10: Stability and reactivity

# 10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

### 10.2. Chemical stability

Chemical stability: Stable under normal conditions.

# 10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

Decomposition may occur on exposure to conditions or materials listed below.

# 10.4. Conditions to avoid

Conditions to avoid: Heat.

# 10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

# 10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

# **Section 11: Toxicological information**

# 11.1. Information on toxicological effects

#### Hazardous ingredients:

# Acrylate monomer

IPR	RAT	LD50	55	mg/kg
ORL	RAT	LD50	5190	μl/kg

# **Acrylate monomer**

IPR	RAT	LD50	760	mg/kg
ORL	RAT	LD50	5	gm/kg

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#### Relevant hazards for substance:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated

### Symptoms / routes of exposure

**Skin contact:** There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may

cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

# Section 12: Ecological information

### 12.1. Toxicity

Ecotoxicity values: No data available.

# 12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

### 12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

# 12.4. Mobility in soil

Mobility: Readily absorbed into soil.

## 12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

# 12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

# Section 13: Disposal considerations

# 13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal

company.

NB: The user's attention is drawn to the possible existence of regional or national

regulations regarding disposal.

# **Section 14: Transport information**

### 14.1. UN number

UN number: Not applicable.

### 14.2. UN proper shipping name

Shipping name: Not applicable.

### 14.3. Transport hazard class(es)

Transport class: Not applicable.

### 14.4. Packing group

Packing group: Not applicable.

# 14.5. Environmental hazards

Environmentally hazardous: Not applicable. Marine pollutant: No

### 14.6. Special precautions for user

Special precautions: No special precautions.

### **Section 15: Regulatory information**

# 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Specific regulations: Not applicable.

# 15.2. Chemical Safety Assessment

### Section 16: Other information

#### Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No

453/2010.

\* indicates text in the SDS which has changed since the last revision.

# Phrases used in s.2 and s.3: H228: Flammable solid.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H361f: Suspected of damaging fertility.

H373: May cause damage to organs through prolonged or repeated exposure.

H412: Harmful to aquatic life with long lasting effects.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from

handling or from contact with the above product.