

**SAFETY DATA SHEET**  
PHOTOCENTRIC 3D RESIN (HARD)

Page: 1

Compilation date: 22/02/2017

Revision No: 2

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

**1.1. Product identifier**

**Product name:** PHOTOCENTRIC 3D DAYLIGHT RESIN (CASTABLE)

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

**Use of substance / mixture:** PC30: Photo-chemicals for 3D printing.

**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](mailto:info@photocentric.co.uk)

**1.4. Emergency telephone number**

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

**Section 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Classification under CLP:** Aquatic Chronic 3: H412; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1A: H317; STOT SE 3: H335

**Most important adverse effects:** Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.  
May cause respiratory irritation. Harmful to aquatic life with long lasting effects.

**2.2. Label elements**

**Label elements:**

**Hazard statements:** H315: Causes skin irritation.  
H317: May cause an allergic skin reaction.  
H319: Causes serious eye irritation.  
H335: May cause respiratory irritation.  
H412: Harmful to aquatic life with long lasting effects.

**Hazard pictograms:** GHS07: Exclamation mark





# SAFETY DATA SHEET

## PHOTOCENTRIC 3D RESIN (HARD)

**Signal words:** Warning

**Precautionary statements:** P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P302+352: IF ON SKIN: Wash with plenty of water/soap and water.  
P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312: Call a POISON CENTER/doctor if you feel unwell.  
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:

##### BISPHENOL A ETHOXYLATE DIMETHACRYLATE

| EINECS | CAS         | PBT / WEL | CLP Classification  | Percent |
|--------|-------------|-----------|---|---------|
| -      | Proprietary | -         | Skin Irrit. 2: H315; Skin Sens. 1A: H317; Eye Irrit. 2: H319; STOT SE 3: H335 | 50-70%  |

##### DIACRYLATE

|   |             |   |   |        |
|---|-------------|---|---|--------|
| - | Proprietary | - | Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317 | 10-30% |
|---|-------------|---|---|--------|

##### ACRYLATE

|   |             |   |   |       |
|---|-------------|---|---|-------|
| - | Proprietary | - | Skin Irrit. 2: H315; Eye Irrit. 2: H319 | 1-10% |
|---|-------------|---|---|-------|

##### ACRYLATE

|   |             |   |                    |       |
|---|-------------|---|--------------------|-------|
| - | Proprietary | - | Eye Irrit. 2: H319 | 1-10% |
|---|-------------|---|--------------------|-------|

##### ACRYLATE

|   |             |   |  |       |
|---|-------------|---|--|-------|
| - | Proprietary | - | Acute Tox. 4: H302; Skin Sens. 1A: H317; Aquatic Chronic 1: H410 | 1-10% |
|---|-------------|---|--|-------|

##### PHOTOINITIATOR

|   |             |   |  |        |
|---|-------------|---|--|--------|
| - | Proprietary | - | Flam. Sol. 1: H228; Repr. 2: H361f; STOT RE 2: H373; Aquatic Chronic 2: H411 | 1-1.5% |
|---|-------------|---|--|--------|

## 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.



## SAFETY DATA SHEET

### PHOTOCENTRIC 3D RESIN (HARD)

Page: 3

**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.

#### 6.4. Reference to other sections

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

[cont...]



# SAFETY DATA SHEET

## PHOTOCENTRIC 3D RESIN (HARD)

Page: 4

### 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 a cool, well ventilated area. Keep container tightly closed.

#### 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.

**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 colours

**Odour:** Characteristic odour

**Evaporation rate:** Negligible

**Oxidising:** No data available.

**Solubility in water:** No data available.

**Also soluble in:** Most organic solvents.

**Viscosity:** Viscous

**Kinematic viscosity:** 200-300cPs

**Viscosity test method:** Brookfield Spindle L2 @ 25 C

**Boiling point/range°C:** No data available.

**Melting point/range°C:** No data available.

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

**upper:** No data available.

**Flash point°C:** >93

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

**Autoflammability°C:** No data available.

**Relative density:** No data available.

**pH:** No data available.

[cont...]



# SAFETY DATA SHEET

## PHOTOCENTRIC 3D RESIN (HARD)

Page: 5

VOC g/l: No data available.

### 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:

#### DIACRYLATE

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

Relevant hazards for product:

| Hazard                         | Route | Basis                 |
|--------------------------------|-------|-----------------------|
| Skin corrosion/irritation      | DRM   | Hazardous: calculated |
| Serious eye damage/irritation  | OPT   | Hazardous: calculated |
| Respiratory/skin sensitisation | -     | Hazardous: calculated |
| STOT-single exposure           | INH   | 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.

[cont...]



## SAFETY DATA SHEET

### PHOTOCENTRIC 3D RESIN (HARD)

Page: 6

**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

**Transport class:** This product does not require a classification for transport.

#### 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

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

#### Section 16: Other information

[cont...]

**SAFETY DATA SHEET**  
PHOTOCENTRIC 3D RESIN (HARD)

Page: 7

**Other information**

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

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

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

H302: Harmful if swallowed.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

H361f: Suspected of damaging fertility.

H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H410: Very toxic to aquatic life with long lasting effects.

H411: Toxic to aquatic life with long lasting effects.

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.