

SECTION 1: Identification

1.1. Identification

Product form	: Mixture
Trade name	: Hard Crystal Clear
Synonyms	: UV DLP Crystal Clear
Other means of identification	: DLPHDCCL01

1.2. Recommended use and restrictions on use

Use of the substance/mixture	: For use in DLP Printers For use in UV Printers
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1.3. Supplier

Supplier

Photocentric Ltd
Titan House
20 Titan Drive
Peterborough, PE1 5XN - United Kingdom
T +44 (0) 1733 349937 (UK Office hours only)
info@photocentric.co.uk - <https://photocentricgroup.com/>

Distributor

Photocentric Inc
855 N. 107th Ave
Suite A110
Avondale, Arizona 85323 - United States
T 006235813220 x1009 (USA Office hours only)
customerservice@photocentricusa.com - <https://photocentricgroup.com/>

1.4. Emergency telephone number

Emergency number	: +44 (0) 1733 349937 (UK Office hours only) 006235813220 x1009 (USA Office hours only) Transport Emergencies for US & CANADA: For Hazardous Materials [or Dangerous Goods] Incident Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC 1-800-424-9300 / +1 703-527-3887 CCN 992854
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SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture



GHS US classification

Skin sensitisation, Category 1	H317	May cause an allergic skin reaction.
Carcinogenicity, Category 2	H351	Suspected of causing cancer.

Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US)	:  
Signal word (GHS US)	: Warning
Hazard statements (GHS US)	: H317 - May cause an allergic skin reaction. H351 - Suspected of causing cancer.
Precautionary statements (GHS US)	: P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P261 - Avoid breathing fume, mist, spray, vapours. P272 - Contaminated work clothing must not be allowed out of the workplace. P280 - Wear protective clothing, protective gloves, eye protection. P302+P352 - If on skin: Wash with plenty of soap and water. P308+P313 - If exposed or concerned: Get medical advice/attention. P321 - Specific treatment (see supplemental first aid instruction on this label). P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P363 - Wash contaminated clothing before reuse. P405 - Store locked up. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

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2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	Conc. (% w/w)	GHS US classification
Proprietary (Triacrylate)* (Note D)	(CAS-No.) Trade Secret	5 – 10	Carc. 2, H351

Note D : Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words 'non-stabilised'.

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a poison center or a doctor if you feel unwell. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash skin with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: 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.
First-aid measures after ingestion	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. If swallowed, seek medical advice immediately and show this container or label. Rinse mouth out with water. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Potential adverse human health effects and symptoms	: Harmful if swallowed. Irritation: severely irritant to eyes. Irritation: may cause irritation to the respiratory system.
Symptoms/effects after inhalation	: Inhalation may cause irritation (cough, short breathing, difficulty in breathing). May cause respiratory irritation.
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes serious eye damage. Eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed. May cause irritation to the digestive tract.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically. In all cases of doubt, or when symptoms persist, seek medical attention. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	: In case of fire, irritating fumes come free.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

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5.3. Special protective equipment and precautions for fire-fighters

Precautionary measures fire	: Keep cool. Protect from sunlight. Store in tightly closed, properly ventilated containers away from heat, sparks, open flame.
Firefighting instructions	: Do not enter fire area without proper protective equipment, including respiratory protection. Evacuate area. In case of fire: stop leak if safe to do so. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	: High temperature decomposition products are harmful by inhalation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Avoid contact with skin and eyes. Evacuate area. May be harmful to aquatic organisms, to flora, to soil organisms. Clean up any spills as soon as possible, using an absorbent material to collect it.
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6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Only qualified personnel equipped with suitable protective equipment may intervene. See section 8 of the SDS for more information on personal protective equipment. Avoid breathing vapours, spray, mist.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Protective gloves. Safety glasses. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Evacuate unnecessary personnel. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent liquid from entering sewers, watercourses, underground or low areas.

6.3. Methods and material for containment and cleaning up

For containment	: For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Collect spillage.
Methods for cleaning up	: Take up liquid spill into absorbent material. This material and its container must be disposed of in a safe way, and as per local legislation.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use.
Handling temperature	: < 50 °C

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Ensure adequate ventilation, especially in confined areas. Store in a well-ventilated place. Keep container tightly closed.
Storage conditions	: Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed.
Incompatible materials	: Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available

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Proprietary (Triacrylate)

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Materials for protective clothing:

Wear suitable protective clothing and gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of inadequate ventilation wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: clear
Odour	: characteristic
Odour threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapour pressure	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: No data available
Density	: 1.09 g/ml
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

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9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Proprietary (Triacrylate)	
LD50 oral rat	> 2000 mg/kg literature
LD50 dermal rabbit	5170 mg/kg Source: RTECS
ATE US (dermal)	5170 mg/kg bodyweight

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.

Proprietary (Triacrylate)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Proprietary (Triacrylate)	
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available

Potential adverse human health effects and symptoms	: Harmful if swallowed. Irritation: severely irritant to eyes. Irritation: may cause irritation to the respiratory system.
Symptoms/effects after inhalation	: Inhalation may cause irritation (cough, short breathing, difficulty in breathing). May cause respiratory irritation.
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes serious eye damage. Eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed. May cause irritation to the digestive tract.
Other information	: Likely routes of exposure: skin and eye.

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. Toxic to aquatic life with long lasting effects.

Proprietary (Triacrylate)

LC50 fish 1	1.47 mg/l Test organisms (species): Leuciscus idus
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12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Proprietary (Triacrylate)

Partition coefficient n-octanol/water (Log Pow)	2.86 Source: QSAR
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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Avoid release to the environment. Comply with applicable regulations for solid waste disposal. Dispose in a safe manner in accordance with local/national regulations.
Additional information : Clean up even minor leaks or spills if possible without unnecessary risk. Consult an expert on waste disposal or treatment.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not applicable

Transportation of Dangerous Goods

Not applicable

Transport by sea

Transport document description (IMDG) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DI-HEMA TRIMETHYLHEXYL DICARBAMATE ; Tricyclodecane dimethanol Diacrylate), 9, III, MARINE POLLUTANT
UN-No. (IMDG) : 3082
Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Class (IMDG) : 9 - Miscellaneous dangerous substances and articles
Packing group (IMDG) : III - substances presenting low danger
Limited quantities (IMDG) : 5 L

Air transport

Transport document description (IATA) : UN 3082 Environmentally hazardous substance, liquid, n.o.s. (DI-HEMA TRIMETHYLHEXYL DICARBAMATE ; Tricyclodecane dimethanol Diacrylate), 9, III
UN-No. (IATA) : 3082
Proper Shipping Name (IATA) : Environmentally hazardous substance, liquid, n.o.s.
Class (IATA) : 9 - Miscellaneous Dangerous Substances and Articles

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Packing group (IATA)

: III - Low danger

SECTION 15: Regulatory information

15.1. US Federal regulations

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All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

Proprietary (Triacrylate)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Proprietary (Triacrylate)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date

: 04/27/2023

Full text of H-statements:

H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.

Abbreviations and acronyms:

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ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.