

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Trade name : Cast DL60 - Black

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : For use in Photocentric Daylight Printers

1.4. Supplier's details

Manufacturer

Photocentric Ltd
Titan House
20 Titan Drive
Peterborough, PE1 5XN, Cambridgeshire
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, AZ, 85323
United States
T 006235813220 x1009 (USA Office hours only)
customerservice@photocentricusa.com - <https://photocentricgroup.com/>

1.5. Emergency phone 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

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids, Category 4	H227	Combustible liquid.
Hazardous to the aquatic environment — Chronic Hazard, Category 1	H410	Very toxic to aquatic life with long lasting effects.
Full text of H statements : see section 16		

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)	: Warning
Hazard statements (GHS US)	: H227 - Combustible liquid H410 - Very toxic to aquatic life with long lasting effects
Precautionary statements (GHS US)	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273 - Avoid release to the environment.

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P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection.

P370+P378 - In case of fire: Use appropriate media to extinguish.

P391 - Collect spillage.

P403 - Store in a well-ventilated place.

P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Conc. (% w/w)	GHS US classification
Proprietary (Acrylate)	≥ 15	Aquatic Chronic 1, H410
Proprietary (Aliphatic urethane methacrylate)	≥ 15 – < 20	Aquatic Chronic 2, H411
Proprietary (Mono acrylate)	≥ 10 – < 15	Aquatic Chronic 1, H410
Proprietary (Mono acrylate)	≥ 5 – < 10	Flam. Liq. 4, H227 Aquatic Chronic 1, H410

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

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	: None under normal conditions.
Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: Harmful if swallowed.

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4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

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 : No fire hazard.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

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SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Ensure that there is a suitable ventilation system. Do not handle in a confined space. Avoid contact with skin, eyes and clothing. Protective clothing (with elasticated cuffs and closed neck). Do not breathe vapors.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Handling temperature	: $\leq 30^{\circ}\text{C}$
Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including incompatibilities

Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Store locked up.
Storage temperature	: $10 - 50^{\circ}\text{C}$
Packaging materials	: Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

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, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Materials for protective clothing:
Wear suitable protective clothing and gloves. Nitrile rubber. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.
Hand protection:
Protective gloves. Wear protective gloves. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Nitrile-rubber protective gloves
Eye protection:
Safety glasses. Safety glasses (EN 166). Chemical goggles or safety glasses
Skin and body protection:
Wear suitable protective clothing. Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact. Protective clothing (EN 14605 or EN 13034). Use footwear with anti-static or anti-spark features
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment. In case of inadequate ventilation wear respiratory protection. Wear suitable respiratory protection (conforming to EN140 with Type A filter or better) and gloves (type EN374) if regular skin contact likely.

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Personal protective equipment symbol(s):



Thermal hazard protection:

Typical measures to maintain workplace concentrations of airborne VOCs and particulates below respective OELs: e.g. thermal wet scrubber – gas removal and/or air filtration – particle removal and/or thermal oxidation and/or vapour recovery – adsorption.

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Liquid
Color	: Black
Odor	: characteristic
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 65 °C
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
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
Explosion limits	: No data available
Particle characteristics	: No data available

DI-HEMA TRIMETHYLHEXYL DICARBAMATE

Particle characteristics	No data available
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Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate

Particle characteristics	No data available
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3,3,5-trimethylcyclohexyl acrylate

Particle characteristics	No data available
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4-(1,1-dimethylethyl)cyclohexyl acrylate

Particle characteristics	No data available
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9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

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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.

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. Likely routes of exposure

Acute toxicity (oral) : No data available
Acute toxicity (dermal) : No data available
Acute toxicity (inhalation) : No data available

Proprietary (Aliphatic urethane methacrylate)	
LD50 oral rat	> 5000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 2000 mg/kg bw/day
LC50 Inhalation - Rat (Dust/Mist)	> 5 mg/l/4h

Proprietary (Acrylate)	
LD50 dermal rabbit	> 3000 mg/kg body weight Animal: rabbit, Animal sex: male, Guideline: other:

Proprietary (Mono acrylate)	
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation : No data available

Serious eye damage/irritation : No data available

Respiratory or skin sensitization : No data available

Germ cell mutagenicity : No data available

Carcinogenicity : No data available

Reproductive toxicity : No data available

STOT-single exposure : No data available

STOT-repeated exposure : No data available

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Proprietary (Mono acrylate)	
NOAEL (oral, rat, 90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Proprietary (Mono acrylate)	
NOAEL (oral, rat, 90 days)	150 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:
Aspiration hazard	: No data available
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Viscosity, kinematic	No data available
Proprietary (Aliphatic urethane methacrylate)	
Viscosity, kinematic	No data available
Proprietary (Acrylate)	
Viscosity, kinematic	No data available
Proprietary (Mono acrylate)	
Viscosity, kinematic	No data available
Proprietary (Mono acrylate)	
Viscosity, kinematic	No data available
Symptoms/effects after inhalation	: None under normal conditions.
Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: Harmful if swallowed.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general	: Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: No data available
Hazardous to the aquatic environment, long-term (chronic)	: Very toxic to aquatic life with long lasting effects.

Proprietary (Aliphatic urethane methacrylate)	
LC50 - Fish [1]	≥ 10.1 mg/l Zebra Fish (Brachydanio rerio)
EC50 - Crustacea [1]	> 1200 µg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 0.68 mg/l
NOEC chronic algae	0.21 mg/l Green Algae (Desmodesmus subspicatus)
Proprietary (Acrylate)	
LC50 - Fish [1]	0.704 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 72h - Algae [1]	1.98 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	0.596 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
LOEC (chronic)	0.277 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

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Proprietary (Acrylate)	
NOEC (chronic)	0.092 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
Proprietary (Mono acrylate)	
LC50 - Fish [1]	1.9 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	14.43 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 0.59 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
Proprietary (Mono acrylate)	
LC50 - Fish [1]	> 1.27 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	1.03 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.539 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)

12.2. Persistence and degradability

Cast DL60 - Black	
Persistence and degradability	Not rapidly degradable
Proprietary (Aliphatic urethane methacrylate)	
Persistence and degradability	Not established.
Biodegradation	22 % CO2 Evolution: Modified Sturm (OECD 301B)
Proprietary (Acrylate)	
Persistence and degradability	Not rapidly degradable
Proprietary (Mono acrylate)	
Persistence and degradability	Not rapidly degradable
Proprietary (Mono acrylate)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

Proprietary (Aliphatic urethane methacrylate)	
Partition coefficient n-octanol/water (Log Pow)	3.39
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

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Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.

SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

UN-No.(DOT)	: Not regulated
UN-No. (TDG)	: Not regulated
UN-No. (IMDG)	: 3082
UN-No. (IATA)	: 3082

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT)	: Not regulated
Proper Shipping Name (TDG)	: Not regulated
Proper Shipping Name (IMDG)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IATA)	: Environmentally hazardous substance, liquid, n.o.s.

14.3. Transport hazard class(es)

DOT

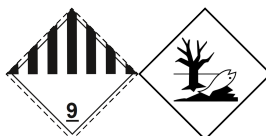
Transport hazard class(es) (DOT)	: Not regulated
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TDG

Transport hazard class(es) (TDG)	: Not regulated
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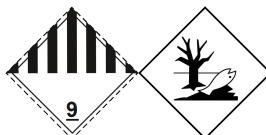
IMDG

Transport hazard class(es) (IMDG)	: 9
Hazard labels (IMDG)	: 9



IATA

Transport hazard class(es) (IATA)	: 9
Hazard labels (IATA)	: 9



14.4. Packing group

Packing group (DOT)	: Not regulated
Packing group (TDG)	: Not regulated
Packing group (IMDG)	: III
Packing group (IATA)	: III

14.5. Environmental hazards

Dangerous for the environment	: Yes
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Marine pollutant : Yes



Other information : No supplementary information available.

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

Not regulated

TDG

Not regulated

IMDG

Special provision (IMDG) : 274, 335, 969
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : LP01, P001
Packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1, TP29
EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage) : S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS
Stowage category (IMDG) : A

IATA

Special provision (IATA) : A97, A158, A197, A215
PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 964
PCA max net quantity (IATA) : 450L
CAO packing instructions (IATA) : 964
CAO max net quantity (IATA) : 450L
ERG code (IATA) : 9L

SECTION 15 Regulatory information

15.1. Federal regulations

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

Proprietary (Mono acrylate)	$\geq 10 - < 15\%$
Proprietary (Mono acrylate)	$\geq 5 - < 10\%$

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.

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15.2. International regulations

CANADA

Proprietary (Aliphatic urethane methacrylate)

Listed on the Canadian NDSL (Non-Domestic Substances List)

Proprietary (Acrylate)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. 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

Issue date : 24/07/2025

Full text of hazard classes and H-statements

H227	Combustible liquid
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

SDS US (GHS HazCom 2012) No CAS

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.