

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Issue date: 1/4/2021 Version: 2.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form Mixture

: DURABLE UV 80 Generic name Photocentric UV Resin Type of product

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

1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use, Consumer use

Use of the substance/mixture : For use in UV Printers

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Photocentric Ltd, UK Cambridge House Oxney Road Peterborough, PE1 5YW - United Kingdom

T +44 (0)1733349937

info@photocentric.co.uk - https://photocentricgroup.com/

1.4. Emergency telephone number

Emergency number : +44 (0) 1733 349937 (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: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

H302 Acute toxicity (oral), Category 4 Skin corrosion/irritation, Category 2 H315 Serious eye damage/eye irritation, Category 1 H318 H317 Skin sensitisation, Category 1 Specific target organ toxicity — Single exposure, Category 3, H335

Respiratory tract irritation

Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Harmful if swallowed. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Harmful to aquatic life with long lasting effects

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)





GHS05

GHS07

Signal word (CLP) : Danger

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: Proprietary (Monomer); Proprietary (Photoinititor); Proprietary (Oligomer) Contains

Hazard statements (CLP) : H302 - Harmful if swallowed. H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage. H335 - May cause respiratory irritation.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P261 - Avoid breathing fume, mist, spray, vapours.vapours, fume, spray.

> P264 - Wash hands thoroughly after handling. P273 - Avoid release to the environment.

P280 - Wear eye protection, protective clothing, protective gloves. P301+P312 - IF SWALLOWED: Call doctor if you feel unwell. P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

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

P312 - Call doctor if you feel unwell.

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Proprietary (Diacrylate)	≥ 50 - < 70	Skin Irrit. 2, H315 Eye Irrit. 2, H319
Proprietary (Monomer)	≥ 25 – < 50	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
Proprietary (Oligomer)	≥ 3 – < 5	Skin Sens. 1, H317 Aquatic Chronic 2, H411
Proprietary (Photoinititor)	≥1-<3	Skin Sens. 1, H317 Aquatic Chronic 4, H413
Proprietary (Diacrylate)	≥ 0.1 – < 1	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. 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. 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. Call a physician immediately.

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First-aid measures after ingestion

 Remove victim to fresh air and keep at rest in a position comfortable for breathing. Provide rest, warmth and fresh air. Immediately rinse mouth and drink plently of water (200-300 ml).
 Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation

 $: \ \ \ \ \, \text{Inhalation may cause irritation (cough, short breathing, difficulty in breathing). May cause}$

respiratory irritation.

Symptoms/effects after skin contact

: May be harmful in contact with skin. Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion

: May be harmful if swallowed. May cause irritation to the digestive tract.

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

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: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

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

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 fume, mist, spray, vapours.

6.1.2. For emergency responders

Protective equipment

: Do not attempt to take action without suitable protective equipment. Use self-contained breathing apparatus and chemically protective clothing. Wear recommended personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures

Evacuate unnecessary personnel. Ventilate area. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

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.

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.

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6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

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.

Precautions for safe handling : Avoid contact with skin, eyes and clothing. Use only outdoors or in a well-ventilated area.

Avoid breathing fume, mist, spray, vapours. Avoid contact with skin and eyes. Wear

personal protective equipment.

Handling temperature : <10<t>50°C

Hygiene measures : Wear personal protective equipment. Wash contaminated clothing before reuse.

Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or

smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed.

Incompatible materials : Direct sunlight. Storage temperature : <10<t>50°C

7.3. Specific end use(s)

The identified uses for this product are detailed in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protective equipment:

Wear recommended personal protective equipment. Safety glasses. Gloves.

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):





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Environmental exposure controls:

Avoid release to the environment.

Consumer exposure controls:

The substance is not classified for human health hazards or for environment effects and it is not PBT or vPvB so that no exposure assessment or risk characterisation is required. For tasks where the intervention of workers is required, the substance must be handled in accordance with good industrial hygiene and safety procedures.

Other information:

Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Appearance : Liquid. Colour Black. Odour characteristic. Odour threshold No data available : No data available Relative evaporation rate (butylacetate=1) : No data available Melting point Not applicable Freezing point : No data available : No data available Boiling point : No data available Flash point · No data available Auto-ignition temperature : No data available Decomposition temperature Flammability (solid, gas) : Not applicable : No data available Vapour pressure Relative vapour density at 20 °C : No data available Relative density : No data available Density : 1.1 g/ml

Solubility : No data available
Partition coefficient n-octanol/water (Log Pow) : No data available
Viscosity, kinematic : 363.636 mm²/s
Viscosity, dynamic : 400 mPa·s 25°C
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

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

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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) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

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ATE CLP (oral) 826.537 mg/kg bodyweight

Proprietary (Diacrylate)

LD50 oral rat > 2000 mg/kg

Proprietary (Monomer)

LD50 oral rat	300 – 2000 mg/kg bodyweight
EDOO OTGI FAL	500 - 2000 mg/kg bodywoight
LD50 dermal rat	> 2000 mg/kg bodyweight

Proprietary (Oligomer)

LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral
	Toxicity)

Proprietary (Photoinititor)

LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: EU Method B.1 (Acute Toxicity (Oral))
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: other:92/69/EEC

Proprietary (Diacrylate)

LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), Guideline: EU Method B.1 tris (Acute Oral Toxicity - Acute Toxic Class Method)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

STOT-single exposure : May cause respiratory irritation.

STOT-repeated exposure : Not classified

Proprietary (Photoinititor)

Reproductive toxicity

NOAEL (oral, rat, 90 days) > 1000 mg/kg bodyweight Animal: rat, Guideline: other:92/69/eec

: Not classified

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Proprietary (Diacrylate)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents), Guideline: EU Method B.7 (Repeated Dose (28 Days) Toxicity (Oral))

Aspiration hazard : Not classified

DURABLE UV 80	
Viscosity, kinematic	363.636 mm²/s
Potential adverse human health effects and	: Harmful if swallowed. Harmful in contact with skin. Irritation: severely irritant to eyes.

Potential adverse human health effects and symptoms

Other information

Harmful if swallowed. Harmful in contact with skin. Irritation: severely irritant to eyes

Irritation: may cause irritation to the respiratory system.

: Likely routes of exposure: ingestion, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Ecology - water : Harmful to aquatic life with long lasting effects.

 $\label{thm:local_equation} \mbox{Hazardous to the aquatic environment, short-term}$

(acute)

Hazardous to the aquatic environment, long-term

(chronic)

Not rapidly degradable

: Not classified

: Harmful to aquatic life with long lasting effects.

Proprietary (Oligomer)	
LC50 fish 1	10.1 mg/l
EC50 Daphnia 1	> 1200 μg/l Test organisms (species): Daphnia magna
EC50 72h algae (1)	> 0.68 mg/l

Proprietary (Photoinititor)	
LC50 fish 1	> 0.09 mg/l Test organisms (species): other:Zebra Fish Brachydanio rerio
EC50 Daphnia 1	> 1.175 mg/l Test organisms (species): other aquatic crustacea:Daphnia Magna
EC50 72h algae (1)	> 0.26 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

Proprietary (Diacrylate)	
EC50 Daphnia 1	2.36 mg/l Test organisms (species): Daphnia magna
EC50 72h algae (1)	1.6 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h algae (2)	0.71 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

12.2. Persistence and degradability

Proprietary (Oligomer)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Proprietary (Monomer)	
Partition coefficient n-octanol/water (Log Pow)	0.8

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Proprietary (Oligomer)	
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. Results of PBT and vPvB assessment

Component	
Proprietary (Diacrylate) (52404-33-8)	PBT: not relevant – no registration required
Proprietary (Oligomer) (72869-86-4)	PBT: not relevant – no registration required

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

Sewage disposal recommendations

Product/Packaging disposal recommendations

Additional information

Dispose of contents/container in accordance with licensed collector's sorting instructions.

Disposal must be done according to official regulations.

Avoid release to the environment. Comply with applicable regulations for solid waste disposal. Dispose in a safe manner in accordance with local/national regulations.

Clean up even minor leaks or spills if possible without unnecessary risk. Consult an expert

on waste disposal or treatment.

: Avoid release to the environment. Ecology - waste materials

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID	
14.1. UN number	14.1. UN number				
Not regulated	Not applicable	Not applicable	Not regulated	Not regulated	
14.2. UN proper shippin	14.2. UN proper shipping name				
Not regulated	Not applicable	Not applicable	Not regulated	Not regulated	
14.3. Transport hazard class(es)					
Not regulated	Not applicable	Not applicable	Not regulated	Not regulated	
14.4. Packing group					
Not regulated	Not applicable	Not applicable	Not regulated	Not regulated	
14.5. Environmental hazards					
Not regulated	Not applicable	Not applicable	Not regulated	Not regulated	
No supplementary information available					

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not applicable

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Air transport

Not applicable

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG)

Observe restrictions according Act on the Protection of Young People in Employment

(JArbSchG)

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

Denmark

SZW-lijst van kankerverwekkende stoffen

SZW-lijst van mutagene stoffen

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Borstvoeding

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen – Vruchtbaarheid

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen – Ontwikkeling

: None of the components are listed

Danish National Negulations

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
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

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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

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

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H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

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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.