



DRIVING SURFACE PERFECTION

U-POL BPO HARDENER

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Product Reference code: according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
SDS Ref. (EU): BPO-SDS
Issue date: 20/04/2015 Revision date: 06/01/2023 Supersedes version of: 13/07/2020 Version: 8.1

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

1.1. Product identifier

Product form : Mixture
Trade name : U-POL BPO HARDENER
UFI : S800-U0RP-S00A-1V0W
Product code : H3840/S, HRED/L, HRED/LB, HAR/WHITE, HWHITE/L, HAR/DISP
Type of product : Hardener
Product group : Organic peroxide

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
Function or use category : Hardener (Crosslinker)

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

U-POL Limited Ltd
Denington Road
GB- NN8 2QH Wellingborough – Northamptonshire
United Kingdom
T +44 (0) 1933 230310
technicalsupport@u-pol.com - www.u-pol.com

Importer

U-POL Netherlands B.V. B.V.
Hoogoorddreef 15
NL- 1101BA Amsterdam
Netherlands
T +31 20 240 2216
technicalsupport@u-pol.com - www.u-pol.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: +44 (0) 870 8200418 (24 hrs)

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	NHS England, Scotland & Wales	-	Call 111 or a Doctor	In Northern Ireland, contact your local GP or pharmacist during normal hours (www.gpoutofhours.hscni.net)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Organic Peroxides, Type E H242
Serious eye damage/eye irritation, Category 2 H319
Skin sensitisation, Category 1 H317
Hazardous to the aquatic environment – Acute Hazard, Category 1 H400
Hazardous to the aquatic environment – Chronic Hazard, Category 1 H410

U-POL BPO HARDENER

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

May cause an allergic skin reaction. Causes serious eye irritation. Very toxic to aquatic life.

2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

: Warning

Contains

: dibenzoyl peroxide

Hazard statements (CLP)

: H242 - Heating may cause a fire.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

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

Precautionary statements (CLP)

: P210 - Keep away from heat, hot surfaces, open flames, sparks. – No smoking.

P234 - Keep only in original container.

P261 - Avoid breathing fume, vapours.

P280 - Wear face protection, protective clothing, protective gloves.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P391 - Collect spillage.

P403+P235 - Store in a well-ventilated place. Keep cool.

Labelling according to: exemption for packages of a capacity of 125ml or less

Hazard pictograms (CLP)



Signal word (CLP)

: Warning

Hazardous ingredients

: dibenzoyl peroxide

Hazard statements (CLP)

: H317 - May cause an allergic skin reaction.

Precautionary statements (CLP)

: P261 - Avoid breathing fume, vapours.

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

Component

ethanediol; ethylene glycol (107-21-1)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

U-POL BPO HARDENER

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
dibenzoyl peroxide	CAS-No.: 94-36-0 EC-No.: 202-327-6 EC Index-No.: 617-008-00-0 REACH-no: 01-2119511472-50	25 – 75	Org. Perox. B, H241 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
ethanediol; ethylene glycol substance with a Community workplace exposure limit	CAS-No.: 107-21-1 EC-No.: 203-473-3 EC Index-No.: 603-027-00-1 REACH-no: 01-2119456816-28	0.1 – 10	Acute Tox. 4 (Oral), H302 STOT RE 2, H373

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

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. Take off contaminated clothing. 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	: 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 skin contact	: May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam.
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5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	: Carbon monoxide. Carbon dioxide. Benzene.
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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	: Use fire control measures appropriate for the surrounding fire. Exposure to fire and heat radiation may cause gas receptacles to rupture. Cool endangered receptacles with water spray jet from a protected position. Prevent water used in emergency cases from entering sewers and drainage systems.

U-POL BPO HARDENER

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Safety glasses. Protective clothing. Gloves.
Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing vapours, fume.

6.1.2. 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".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Do not allow to dry. Collect spillage.
Methods for cleaning up : Mechanically recover the product.
Other information : Ensure adequate ventilation. Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Take precautions against electrostatic charges. Avoid contact with skin and eyes. Avoid breathing vapours, fume. Wear personal protective equipment.
Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. 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.
Storage temperature : 5 – 25 °C (reccomended)
Storage area : Store in a well-ventilated place.
Special rules on packaging : Keep only in original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

U-POL BPO HARDENER	
United Kingdom - Occupational Exposure Limits	
Local name	Dibenzoyl peroxide
WEL TWA (OEL TWA) [1]	5 mg/m ³

U-POL BPO HARDENER

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ethanediol; ethylene glycol (107-21-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Ethylene glycol
IOEL TWA	52 mg/m ³
IOEL TWA [ppm]	20 ppm
IOEL STEL	104 mg/m ³
IOEL STEL [ppm]	40 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Ireland - Occupational Exposure Limits	
Local name	Ethane-1,2-diol [Ethylene glycol]
OEL TWA [1]	10 mg/m ³ particulate 52 mg/m ³ vapour
OEL TWA [2]	20 ppm vapour
OEL STEL	104 mg/m ³ vapour
OEL STEL [ppm]	40 ppm vapour
Remark	Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body), IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2020
United Kingdom - Occupational Exposure Limits	
Local name	Ethane-1,2-diol
WEL TWA (OEL TWA) [1]	10 mg/m ³ 52 mg/m ³
WEL TWA (OEL TWA) [2]	20 ppm
WEL STEL (OEL STEL)	104 mg/m ³
WEL STEL (OEL STEL) [ppm]	40 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
dibenzoyl peroxide (94-36-0)	
Ireland - Occupational Exposure Limits	
Local name	Dibenzoyl peroxide [Benzoyl peroxide]
OEL TWA [1]	5 mg/m ³
Remark	Sens. (In the workplace respiratory or dermal exposures to sensitising agents may occur. Sensitizers may evoke respiratory or dermal reactions, e.g. asthma, rhinitis and allergic contact dermatitis. The notation does not distinguish between respiratory or dermal sensitisation. Chemical agents that are sensitizers present special problems in the workplace. Should an employee become sensitised, subsequent exposure may cause intense responses, even at low exposure concentrations well below the OELV. Exposure should be eliminated or significantly reduced through control measures such as engineering and process controls and use of personal protective equipment (PPE))
Regulatory reference	Chemical Agents Code of Practice 2020

U-POL BPO HARDENER

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

dibenzoyl peroxide (94-36-0)

United Kingdom - Occupational Exposure Limits

Local name	Dibenzoyl peroxide
WEL TWA (OEL TWA) [1]	5 mg/m ³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

Exposure limit values for the other components

dimethyl phthalate (131-11-3)

Ireland - Occupational Exposure Limits

Local name	Dimethyl phthalate	
OEL TWA [1]	5 mg/m ³	
OEL STEL	10 mg/m ³	
Regulatory reference	Chemical Agents Code of Practice 2020	

United Kingdom - Occupational Exposure Limits

Local name	Dimethyl phthalate	
WEL TWA (OEL TWA) [1]	5 mg/m ³	
WEL STEL (OEL STEL)	10 mg/m ³	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

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DNEL/DMEL (Workers)

Long-term - systemic effects, dermal	13.3 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	39 mg/m ³

DNEL/DMEL (General population)

Acute - systemic effects, oral	2 mg/kg bodyweight
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PNEC (Water)

PNEC aqua (freshwater)	0.00002 mg/l
PNEC aqua (marine water)	0.000002 mg/l
PNEC aqua (intermittent, freshwater)	0.000602 mg/l

PNEC (Sediment)

PNEC sediment (freshwater)	0.0127 mg/kg dwt
PNEC sediment (marine water)	0.00127 mg/kg dwt

PNEC (Soil)

PNEC soil	0.0025 mg/kg dwt
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PNEC (STP)

PNEC sewage treatment plant	0.35 mg/l
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U-POL BPO HARDENER

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Protective clothing. Safety glasses.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Protective gloves	Neoprene rubber (HNBR), Nitrile rubber (NBR)	2 (> 30 minutes)	≥0.14mm		EN 374-3

Other skin protection

Materials for protective clothing:

Impermeable clothing

8.2.2.3. Respiratory protection

Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Red. White. Blue.
Appearance	: Paste.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not available

U-POL BPO HARDENER

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Freezing point	: Not applicable
Boiling point	: Not available
Flammability	: May cause fire
Explosive limits	: Not applicable
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
SADT	: 50 °C
pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1.1 g/cm ³
Relative density	: Not applicable
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available
Particle size distribution	: Not available
Particle shape	: Not available
Particle aspect ratio	: Not available
Particle aggregation state	: Not available
Particle agglomeration state	: Not available
Particle specific surface area	: Not available
Particle dustiness	: Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content : 0 g/l

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

SADT.

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

Benzene.

U-POL BPO HARDENER

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

dimethyl phthalate (131-11-3)	
LD50 oral rat	8200 mg/kg bodyweight Animal: rat
LD50 dermal rabbit	> 12000 mg/kg bodyweight Animal: rabbit
LC50 Inhalation - Rat	> 10.4 mg/l (6 h, Rat, Experimental value, Inhalation (vapours))

ethanediol; ethylene glycol (107-21-1)	
LD50 oral rat	7712 mg/kg bodyweight Animal: rat
LD50 dermal	> 3500 mg/kg bodyweight (Mouse, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	> 2.5 mg/l (6 h, Rat, Male / female, Experimental value, Inhalation (aerosol))

dibenzoyl peroxide (94-36-0)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Animal sex: male

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

dibenzoyl peroxide (94-36-0)	
IARC group	3 - Not classifiable

ethanediol; ethylene glycol (107-21-1)	
NOAEL (chronic, oral, animal/male, 2 years)	1500 mg/kg bodyweight Animal: mouse, Animal sex: male, Remarks on results: other:Effect type: carcinogenicity (migrated information)

Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

dimethyl phthalate (131-11-3)	
NOAEL (oral, rat, 90 days)	770 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

ethanediol; ethylene glycol (107-21-1)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life.
Hazardous to the aquatic environment, short-term (acute) : Very toxic to aquatic life.

U-POL BPO HARDENER

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Hazardous to the aquatic environment, long-term (chronic) : Very toxic to aquatic life with long lasting effects.

ethanediol; ethylene glycol (107-21-1)	
LC50 - Fish [1]	72860 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [2]	6500 – 13000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	≥ 1000 mg/l Test organisms (species): Americamysis bahia (previous name: Mysidopsis bahia) Duration: '23 d'

dibenzoyl peroxide (94-36-0)	
LC50 - Fish [1]	0.0602 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	0.11 mg/l Test organisms (species): Daphnia magna

12.2. Persistence and degradability

ethanediol; ethylene glycol (107-21-1)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.47 g O ₂ /g substance
Chemical oxygen demand (COD)	1.24 g O ₂ /g substance
ThOD	1.29 g O ₂ /g substance

12.3. Bioaccumulative potential

ethanediol; ethylene glycol (107-21-1)	
Partition coefficient n-octanol/water (Log Pow)	-1.36 (Experimental value)
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

ethanediol; ethylene glycol (107-21-1)	
Surface tension	48.4 mN/m (20 °C)
Ecology - soil	Highly mobile in soil.

12.5. Results of PBT and vPvB assessment

Component	
ethanediol; ethylene glycol (107-21-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

U-POL BPO HARDENER

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

SECTION 14: Transport information

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

14.1. UN number or ID number

- UN-No. (ADR) : UN 3108
UN-No. (IMDG) : UN 3108
UN-No. (IATA) : UN 3108
UN-No. (ADN) : UN 3108
UN-No. (RID) : UN 3108

14.2. UN proper shipping name

- Proper Shipping Name (ADR) : ORGANIC PEROXIDE TYPE E, SOLID ((dibenzoyl peroxide), ENVIRONMENTALLY HAZARDOUS)
Proper Shipping Name (IMDG) : ORGANIC PEROXIDE TYPE E, SOLID ((dibenzoyl peroxide))
Proper Shipping Name (IATA) : Organic peroxide type e, solid ((dibenzoyl peroxide))
Proper Shipping Name (ADN) : ORGANIC PEROXIDE TYPE E, SOLID ((dibenzoyl peroxide))
Proper Shipping Name (RID) : ORGANIC PEROXIDE TYPE E, SOLID ((dibenzoyl peroxide))
Transport document description (ADR) : UN 3108 ORGANIC PEROXIDE TYPE E, SOLID ((dibenzoyl peroxide), ENVIRONMENTALLY HAZARDOUS), 5.2, (D), ENVIRONMENTALLY HAZARDOUS
Transport document description (IMDG) : UN 3108 ORGANIC PEROXIDE TYPE E, SOLID ((dibenzoyl peroxide)), 5.2, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA) : UN 3108 Organic peroxide type e, solid ((dibenzoyl peroxide)), 5.2, ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN) : UN 3108 ORGANIC PEROXIDE TYPE E, SOLID ((dibenzoyl peroxide)), 5.2, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID) : UN 3108 ORGANIC PEROXIDE TYPE E, SOLID ((dibenzoyl peroxide)), 5.2, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR

- Transport hazard class(es) (ADR) : 5.2
Danger labels (ADR) : 5.2



IMDG

- Transport hazard class(es) (IMDG) : 5.2
Danger labels (IMDG) : 5.2



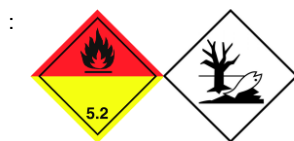
IATA

- Transport hazard class(es) (IATA) : 5.2
Danger labels (IATA) : 5.2

U-POL BPO HARDENER

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878



ADN

Transport hazard class(es) (ADN) : 5.2
Danger labels (ADN) : 5.2



RID

Transport hazard class(es) (RID) : 5.2
Danger labels (RID) : 5.2



14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : Yes
Marine pollutant : Yes
Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR) : P1
Special provisions (ADR) : 122, 274
Limited quantities (ADR) : 500g
Excepted quantities (ADR) : E0
Packing instructions (ADR) : P520
Mixed packing provisions (ADR) : MP4
Transport category (ADR) : 2
Special provisions for carriage - Packages (ADR) : V1
Special provisions for carriage - Loading, unloading and handling (ADR) : CV15, CV22, CV24
Tunnel restriction code (ADR) : D
EAC code : 1W

Transport by sea

Special provisions (IMDG) : 122, 274
Packing instructions (IMDG) : P520
EmS-No. (Fire) : F-J
EmS-No. (Spillage) : S-R
Stowage category (IMDG) : D
Stowage and handling (IMDG) : SW1
Segregation (IMDG) : SG35, SG36
Properties and observations (IMDG) : Decomposes at elevated temperatures or in a fire. Burns vigorously. Insoluble in water. Contact with the eyes and skin should be avoided. May evolve irritant or toxic fumes.

U-POL BPO HARDENER

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Air transport

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Forbidden
PCA limited quantity max net quantity (IATA)	: Forbidden
PCA packing instructions (IATA)	: 570
PCA max net quantity (IATA)	: 10kg
CAO packing instructions (IATA)	: 570
CAO max net quantity (IATA)	: 25kg
Special provisions (IATA)	: A20
ERG code (IATA)	: 5L

Inland waterway transport

Classification code (ADN)	: P1
Special provisions (ADN)	: 122, 274
Limited quantities (ADN)	: 500 g
Excepted quantities (ADN)	: E0
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 0

Rail transport

Classification code (RID)	: P1
Special provisions (RID)	: 122, 274
Limited quantities (RID)	: 500g
Excepted quantities (RID)	: E0
Packing instructions (RID)	: P520
Mixed packing provisions (RID)	: MP4
Transport category (RID)	: 2
Special provisions for carriage – Packages (RID)	: W7
Special provisions for carriage - Loading, unloading and handling (RID)	: CW22, CW24, CW29
Colis express (express parcels) (RID)	: CE10
Hazard identification number (RID)	: 539

14.7. Maritime transport in bulk according to IMO instruments

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

EU restriction list (REACH Annex XVII)

Reference code	Applicable on	Entry title or description
3(b)	ethylene glycol	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

Contains no substance(s) listed on the REACH Candidate List

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

VOC content : 0 g/l

15.1.2. National regulations

No additional information available

U-POL BPO HARDENER

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

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
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H241	Heating may cause a fire or explosion.
H242	Heating may cause a fire.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Org. Perox. B	Organic Peroxides, Type B
Org. Perox. E	Organic Peroxides, Type E
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2

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