



# ISOPON BPO HARDENER

## Safety Data Sheet

according to the Model Work Health and Safety Regulations

DRIVING SURFACE PERFECTION

Date of issue: 27/01/2017

Revision date: 01/05/2019

Supersedes: 28/11/2017

Version: 4.1

### SECTION 1: Identification : Product identifier and chemical identity

#### 1.1. Product identifier

Product form : Mixture  
Trade name : ISOPON BPO HARDENER

#### 1.2. Other means of identification

Other means of identification : Component of: GL/LA/D, GL/SM/D, SSCF/PBX, MET/S, P38/PBX, P38/KIT, P38/S, P38/1, P38/5, P38/CART, P40/S, P40/1, P40/2, P40/4, P40/PBX, PBF/250, ALWH/KIT, ALWH/PBX, BRKIT, PBF/PBX

#### 1.3. Recommended use of the chemical and restrictions on use

Recommended use : Hardener

#### 1.4. Supplier's details

##### Supplier

U-POL AUSTRALIA PTY LIMITED  
Unit A, 16 - 20 Cassola Place  
Penrith, NSW 2750 - Australia  
T 02 4731 2655 - F 02 4731 2611  
[info@u-pol.co.nz](mailto:info@u-pol.co.nz) - [www.u-pol.com.au](http://www.u-pol.com.au)

##### Supplier

U-POL NEW ZEALAND LIMITED  
c/o Lindsay & Associates  
Unit H, 12 Amara Place, East Tamaki  
Manukau City 2013 - New Zealand  
T + 612 4731 2655 - F + 612 4731 2611  
[technicalsupport@u-pol.com](mailto:technicalsupport@u-pol.com) - [www.u-pol.com](http://www.u-pol.com)

#### 1.5. Emergency phone number

Emergency number : Australia (CHEMTREC): + (61) - 290372994 ; New Zealand (National Poisons Centre): 0800 764 766

### SECTION 2: Hazards identification

#### 2.1. Classification of the hazardous chemical

##### Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Organic Peroxides, Type E H242  
Serious eye damage/eye irritation, Category 2A H319  
Skin sensitisation, Category 1 H317

#### 2.2. Label elements

Hazard pictograms (GHS AU) :



Signal word (GHS AU) :

Warning

Contains :

dibenzoyl peroxide; benzoyl peroxide (43 - 63 %)

Hazard statements (GHS AU) :

H242 - Heating may cause a fire.  
H317 - May cause an allergic skin reaction.  
H319 - Causes serious eye irritation.

Precautionary statements (GHS AU) :

P210 - Keep away from heat, hot surfaces, open flames, sparks. No smoking.  
P264 - Wash hands thoroughly after handling.  
P280 - Wear eye protection, protective clothing, protective gloves.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P420 - Store away from other materials.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

#### 2.3. Other hazards

No additional information available

### SECTION 3: Composition/information on ingredients

Name	CAS-No.	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
dibenzoyl peroxide; benzoyl peroxide ( )	94-36-0	43 - 63	Org. Perox. B, H241 Eye Irrit. 2A, H319 Skin Sens. 1, H317
dimethyl phthalate ( )	131-11-3	23 - 43	Not classified

# ISOPON BPO HARDENER

## Safety Data Sheet

according to the Model Work Health and Safety Regulations

Name	CAS-No.	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
ethanediol; ethylene glycol ( <sup>0</sup> )	107-21-1	< 23	Acute Tox. 4 (Oral), H302
Other substances (not contributing to the classification of this product)		3.1 - 29.9	

### 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 eyes with water as a precaution.
- First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

#### 4.2. Symptoms caused by exposure

- Symptoms/effects after skin contact : May cause an allergic skin reaction.

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

- Other medical advice or treatment : Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam.

#### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Heating may cause a fire.

#### 5.3. Special protective equipment and precautions for fire-fighters

- 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.

### 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. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

##### 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. Notify authorities if product enters sewers or public waters.

### SECTION 7: Handling and storage, including how the chemical may be safely used

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Take precautions against electrostatic charges. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.
- 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.

# ISOPON BPO HARDENER

## Safety Data Sheet

according to the Model Work Health and Safety Regulations

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store away from other materials. Protect from sunlight. Keep only in original container. Keep cool. Store in a well-ventilated place.
Incompatible materials	: combustible materials.
Storage temperature	: 5 - 25 °C (reccomended)
Storage area	: Store in a well-ventilated place.
Special rules on packaging	: Keep only in original container.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters - exposure standards

ISOPON BPO HARDENER		
Australia	Local name	Benzoyl peroxide
Australia	TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Australia	Remark (AU)	Sen - Respiratory and/or Skin Sensitiser.
New Zealand	Local name	Benzoyl peroxide
New Zealand	TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
New Zealand	Regulatory reference	Worplace Exposure Standards and Biological Exposure Indices, 8th Edition

dimethyl phthalate (131-11-3)		
Australia	Local name	Dimethylphthalate
Australia	TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
New Zealand	Local name	Dimethylphthalate
New Zealand	TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
New Zealand	Regulatory reference	Worplace Exposure Standards and Biological Exposure Indices, 8th Edition

ethanediol; ethylene glycol (107-21-1)		
Australia	Local name	Ethylene glycol
Australia	TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (particulate) 52 mg/m <sup>3</sup> (vapour)
Australia	TWA (ppm)	20 ppm (vapour)
Australia	Remark (AU)	Sk - Absorption through the skin may be a significant source of exposure.
New Zealand	Local name	Ethylene glycol (vapour and mist)
New Zealand	Regulatory reference	Worplace Exposure Standards and Biological Exposure Indices, 8th Edition

dibenzoyl peroxide; benzoyl peroxide (94-36-0)		
Australia	Local name	Benzoyl peroxide
Australia	TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Australia	Remark (AU)	Sen - Respiratory and/or Skin Sensitiser.

### Exposure limit values for the other components

#### 8.2. Monitoring

No additional information available

#### 8.3. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

#### 8.4. Personal protective equipment

Personal protective equipment : Gloves. Protective clothing. Safety glasses.  
Materials for protective clothing : Impermeable clothing  
Hand protection : Protective gloves

# ISOPON BPO HARDENER

## Safety Data Sheet

according to the Model Work Health and Safety Regulations

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

Eye protection : Safety glasses

Skin and body protection : Wear suitable protective clothing

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

Personal protective equipment symbol(s)



Environmental exposure controls : Avoid release to the environment.

### SECTION 9: Physical and chemical properties

Physical state	: Solid
Appearance	: Paste.
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point / Freezing point	: Freezing point : Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative density	: No data available
Density	: Density : ≈ 1.1 g/cm <sup>3</sup> Relative density : Not applicable
Solubility	: insoluble in water.
Log Pow	: No data available
Viscosity, dynamic	: ≈
Explosive properties	: No data available
Explosive limits	: Not applicable
Minimum ignition energy	: No data available
SADT	: 50 °C
VOC content	: 0 g/l
VOC content - Regulatory	: No data available

### SECTION 10: Stability and reactivity

Reactivity	: Heating may cause a fire.Heating may cause a fire.
Chemical stability	: SADT.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	: Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.
Incompatible materials	: Combustible materials.
Hazardous decomposition products	: Benzene.

### SECTION 11: Toxicological information

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

# ISOPON BPO HARDENER

## Safety Data Sheet

according to the Model Work Health and Safety Regulations

Acute toxicity (inhalation) : Not classified

<b>dimethyl phthalate (131-11-3)</b>	
LD50 oral rat	8200 mg/kg bodyweight (Rat, Experimental value, Oral)
LD50 dermal rabbit	> 12000 mg/kg bodyweight (Rabbit, Experimental value, Dermal)
LC50 inhalation rat (mg/l)	> 10.4 mg/l (6 h, Rat, Experimental value, Inhalation (vapours))
<b>ethanediol; ethylene glycol (107-21-1)</b>	
LD50 oral rat	7712 mg/kg bodyweight (according to BASF-internal standards, Rat, Male/female, Experimental value, Aqueous solution, Oral, 7 day(s))
LD50 dermal	> 3500 mg/kg bodyweight (Mouse, Male/female, Experimental value, Dermal)
LC50 inhalation rat (mg/l)	> 2.5 mg/l (6 h, Rat, Male/female, Experimental value, Inhalation (aerosol))

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

## SECTION 12: Ecological information

According to the National Code of Practice for the Preparation of Material Safety Data Sheets, Environmental classification information is not mandatory. Information relevant for GHS classification is available on request

### 12.1. Ecotoxicity

Ecology - general : Very toxic to aquatic life.  
Acute aquatic toxicity : Not classified  
Chronic aquatic toxicity : Not classified

<b>dimethyl phthalate (131-11-3)</b>	
BCF fish 1	57 (Equivalent or similar to OECD 305, 21 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Experimental value)
Log Pow	1.54 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
Log Koc	1.57 (log Koc, SRC PCKOCWIN v1.66, Calculated value)
<b>ethanediol; ethylene glycol (107-21-1)</b>	
LC50 fish 1	40761 mg/l (96 h, Salmo gairdneri, Static system)
EC50 Daphnia 1	> 10000 mg/l (24 h, Daphnia magna)
BCF fish 1	10 (72 h, Leuciscus idus)
BCF other aquatic organisms 1	0.21 - 0.6 (Procambarus sp., Chronic)
BCF other aquatic organisms 2	190 (24 h, Algae)
Log Pow	-1.34 (Experimental value)

### 12.2. Persistence and degradability

<b>dimethyl phthalate (131-11-3)</b>	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.12 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.7 g O <sub>2</sub> /g substance
ThOD	1.73 g O <sub>2</sub> /g substance
<b>ethanediol; ethylene glycol (107-21-1)</b>	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.47 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.24 g O <sub>2</sub> /g substance
ThOD	1.29 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.36

### 12.3. Bioaccumulative potential

# ISOPON BPO HARDENER

## Safety Data Sheet

according to the Model Work Health and Safety Regulations

<b>dimethyl phthalate (131-11-3)</b>	
BCF fish 1	See section 12.1 on ecotoxicology
Log Pow	See section 12.1 on ecotoxicology
Log Koc	See section 12.1 on ecotoxicology
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

<b>ethanediol; ethylene glycol (107-21-1)</b>	
BCF fish 1	See section 12.1 on ecotoxicology
BCF other aquatic organisms 1	See section 12.1 on ecotoxicology
BCF other aquatic organisms 2	See section 12.1 on ecotoxicology
Log Pow	See section 12.1 on ecotoxicology
Bioaccumulative potential	Not bioaccumulative.

### 12.4. Mobility in soil

<b>dimethyl phthalate (131-11-3)</b>	
Log Pow	See section 12.1 on ecotoxicology
Log Koc	See section 12.1 on ecotoxicology
Ecology - soil	Highly mobile in soil.

<b>ethanediol; ethylene glycol (107-21-1)</b>	
Surface tension	48 mN/m (20 °C)
Log Pow	See section 12.1 on ecotoxicology
Ecology - soil	No (test)data on mobility of the substance available.

### 12.5. Other adverse effects

Ozone	: Not classified
Other adverse effects	: No additional information available

<b>ISOPON BPO HARDENER</b>	
Fluorinated greenhouse gases	False

<b>dimethyl phthalate (131-11-3)</b>	
Fluorinated greenhouse gases	False

<b>ethanediol; ethylene glycol (107-21-1)</b>	
Fluorinated greenhouse gases	False

<b>dibenzoyl peroxide; benzoyl peroxide (94-36-0)</b>	
Fluorinated greenhouse gases	False

## SECTION 13: Disposal considerations

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

<b>14.1. UN number</b>	
UN-No. (ADG)	: 3108
UN-No. (IMDG)	: 3108
UN-No. (IATA)	: 3108

<b>14.2. Proper Shipping Name - Addition</b>	
Proper Shipping Name (ADG)	: ORGANIC PEROXIDE TYPE E, SOLID
Proper Shipping Name (IMDG)	: ORGANIC PEROXIDE TYPE E, SOLID
Proper Shipping Name (IATA)	: Organic peroxide type e, solid

### 14.3. Transport hazard class(es)

<b>ADG</b>	
Transport hazard class(es) (ADG)	: 5.2
Danger labels (ADG)	: 5.2
	:



# ISOPON BPO HARDENER

## Safety Data Sheet

according to the Model Work Health and Safety Regulations

### IMDG

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



### IATA

Transport hazard class(es) (IATA) : 5.2  
Hazard labels (IATA) : 5.2



### 14.4. Packing group

Packing group (ADG) : Not applicable  
Packing group (IMDG) : Not applicable  
Packing group (IATA) : Not applicable

### 14.5. Environmental hazards

Marine pollutant : No

### 14.6. Special precautions for user

Specific storage requirement : No data available  
Shock sensitivity : No data available

### 14.7. Additional information

Other information : No supplementary information available

### Transport by road and rail

UN-No. (ADG) : 3108  
Special provision (ADG) : 122, 274, 323  
Limited quantities (ADG) : 500g  
Packing instructions (ADG) : P520

### Transport by sea

UN-No. (IMDG) : 3108  
Special provisions (IMDG) : 122, 274  
Packing instructions (IMDG) : P520  
EmS-No. (Fire) : F-J - FIRE SCHEDULE Juliet - NON-TEMPERATURE-CONTROLLED SELF-REACTIVES AND ORGANIC PEROXIDES  
EmS-No. (Spillage) : S-R - SPILLAGE SCHEDULE Romeo - ORGANIC PEROXIDES  
Stowage category (IMDG) : D  
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.

### Air transport

UN-No. (IATA) : 3108  
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

# ISOPON BPO HARDENER

## Safety Data Sheet

according to the Model Work Health and Safety Regulations

Special provisions (IATA) : A20  
ERG code (IATA) : 5L

### 14.8. Hazchem or Emergency Action Code

Hazchemcode : Not applicable

## SECTION 15: Regulatory information

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

#### Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Covered by The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) : This chemical is covered by the Standard for the Uniform Scheduling of Medicines and Poisons

Relevant Poisons Schedule number : Schedule 5

#### Hazardous Substances and New Organisms Act

HSNO Approval Number : HSR002629

Group standard : Oxidising substances (class 5.1.1) and organic peroxides (class 5.2)

### 15.2. International agreements

No additional information available

## SECTION 16: Any other relevant information

Revision date : 01/05/2019

Classification:

Org. Perox. E	H242
Eye Irrit. 2A	H319
Skin Sens. 1	H317

Full text of H-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Org. Perox. B	Organic Peroxides, Type B
Org. Perox. E	Organic Peroxides, Type E
Skin Sens. 1	Skin sensitisation, Category 1
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.

SDS Australia U-POL

*For professional use only.*

*The information contained within this Safety Data Sheet (SDS) is believed to be correct as of the date issued however it is subject to change from time to time. It does not purport to be all inclusive or exhaustive and shall only be used as a guide. U-POL makes no warranties, expressed or implied, including but not limited to, any implied warranty of fitness for a given purpose or usage. It is the Buyers responsibility to ensure the suitability of the products for their own use and to check the information is up to date. U-POL cannot be held responsible for the suitability of use for any of its products, considering the wide range of factors such as application, substrates and handling methods. Since these conditions of use are outside of our control, the company shall not be held liable for any damage resulting from handling or from contact with the product detailed. Moreover, addition of reducers, hardeners or other additives over and above U-POL's recommendations for use, may substantially alter the composition and hazards of the product. U-POL data sheets are available via the U-POL website at WWW.U-POL.COM.*