



DRIVING SURFACE PERFECTION

# BPO HARDENER

## Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations  
Issue date: 27/01/2017 Revision date: 1/05/2019 Supersedes: 28/11/2017 Version: 4.1

### SECTION 1: Product identifier

#### 1.1. GHS Product identifier

Product form : Mixture  
Trade name : BPO HARDENER  
Product code : H3840/S, HWHITE/L, HRED/L

#### 1.2. Other means of identification

No additional information available

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

Recommended use : Coating

#### 1.4. Details of manufacturer or importer

##### Supplier

U-POL Australia Pty Limited Ltd  
55 Leland Street  
Penrith NSW 2750  
Australia  
T 02 4731 2655 - F 02 4731 2611  
[info@u-pol.com.au](mailto:info@u-pol.com.au) - [www.u-pol.com](http://www.u-pol.com)

##### Supplier

U-POL New Zealand Limited Ltd  
c/o Lindsay & Associates Unit H, 12 Amara Place, East Tamaki  
Manukau City Auckland 2013  
New Zealand  
T + 612 4731 2655 / 027 630 3691 - F + 612 4731 2611  
[info@u-pol.co.nz](mailto:info@u-pol.co.nz) - [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: Hazard 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. GHS Label elements, including precautionary statements

Hazard pictograms (GHS AU) :



Signal word (GHS AU) : Warning  
Contains : dibenzoyl peroxide (30 – 60 %)  
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, sparks, open flames and other ignition sources. No smoking. heat, hot surfaces, open flames, sparks  
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 separately.

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

### 2.3. Other hazards which do not result in classification

No additional information available

## SECTION 3: Composition and information on ingredients

Name	CAS-No.	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
dibenzoyl peroxide	94-36-0	30 – 60	Org. Perox. B, H241 Eye Irrit. 2A, H319 Skin Sens. 1, H317
Other substances (not contributing to the classification of this product)	-	48 – 55	-

## SECTION 4: First aid measures

### 4.1. Description of necessary 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.
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### 4.3. Medical attention and special treatment

Other medical advice or treatment	: Treat symptomatically.
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## SECTION 5: Fire-fighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam.
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### 5.2. Specific hazards arising from the chemical

Fire hazard	: Heating may cause a fire.
Hazardous decomposition products in case of fire	: Carbon monoxide. Carbon dioxide. Benzene.

### 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.

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### 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 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 materials 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

#### 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 vapours, fume.  
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 away from other materials. Protect from sunlight. Keep only in original container. Keep cool. Store in a well-ventilated place.  
Incompatible products : Keep away from reducing agents/(strong) acids /(strong) bases and metals.  
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 and personal protection

#### 8.1. Control parameters - exposure standards

BPO HARDENER	
New Zealand - Occupational Exposure Limits	
Local name	Benzoyl peroxide
WES-TWA (OEL TWA) [1]	5 mg/m <sup>3</sup>
Remark (NZ)	dsen (Dermal sensitiser)
dibenzoyl peroxide (94-36-0)	
Australia - Occupational Exposure Limits	
Local name	Benzoyl peroxide (Dibenzoyl peroxide)
OES TWA [1]	5 mg/m <sup>3</sup>

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dibenzoyl peroxide (94-36-0)	
Remark (AU)	Sen - Respiratory and/or Skin Sensitiser.
Regulatory reference	Workplace exposure standards for airborne contaminants (2019)
New Zealand - Occupational Exposure Limits	
Local name	Benzoyl peroxide
WES-TWA (OEL TWA) [1]	5 mg/m <sup>3</sup>
Remark (NZ)	dsen (Dermal sensitiser)
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition

### Exposure limit values for the other components

dimethyl phthalate (131-11-3)		
Australia - Occupational Exposure Limits		
Local name	Dimethylphthalate	
OES TWA [1]	5 mg/m <sup>3</sup>	
Regulatory reference	Workplace exposure standards for airborne contaminants (2019)	
New Zealand - Occupational Exposure Limits		
Local name	Dimethylphthalate	
WES-TWA (OEL TWA) [1]	5 mg/m <sup>3</sup>	
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition	

ethanediol; ethylene glycol (107-21-1)		
Australia - Occupational Exposure Limits		
Local name	Ethylene glycol (Ethane-1,2-diol)	
OES TWA [1]	10 mg/m <sup>3</sup> particulate 52 mg/m <sup>3</sup> vapour	
OES TWA [2]	20 ppm vapour	
OES STEL	104 mg/m <sup>3</sup> vapour	
OES STEL [ppm]	40 ppm vapour	
Remark (AU)	Sk - Absorption through the skin may be a significant source of exposure.	
Regulatory reference	Workplace exposure standards for airborne contaminants (2019)	
New Zealand - Occupational Exposure Limits		
Local name	Ethylene glycol (vapour and mist)	
WES-C (OEL C)	127 mg/m <sup>3</sup>	
WES-C (OEL C) [ppm]	50 ppm	
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition	

### 8.2. Biological Monitoring

No additional information available

### 8.3. Engineering controls

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

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### 8.4. Individual protection measures, such as personal protective equipment (PPE)

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

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 : Red White Blue  
Odour : characteristic  
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 : 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.  
Partition coefficient n-octanol/water (Log Pow) : No data available  
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  
Percent Solids : 0 wt%

### SECTION 10: Stability and reactivity

Reactivity : 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.

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### SECTION 11: Toxicological information

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

#### dibenzoyl peroxide (94-36-0)

LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Animal sex: male
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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.  
Hazardous to the aquatic environment, short-term (acute) : Not classified  
Hazardous to the aquatic environment, long-term (chronic) : Not classified

#### 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

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

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

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Fluorinated greenhouse gases	False
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#### dibenzoyl peroxide (94-36-0)

Fluorinated greenhouse gases	False
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### 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

#### 14.1. UN number

UN-No. (ADG) : 3108  
UN-No. (IMDG) : 3108  
UN-No. (IATA) : 3108

#### 14.2. UN Proper Shipping Name

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)

##### ADG

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



#### 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  
Dangerous for the environment : No  
Other information : No supplementary information available

#### 14.6. Special precautions for user

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

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

### 14.8. Hazchem or Emergency Action Code

Hazchem Code : Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations specific for the product in question

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

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)

#### ethanediol; ethylene glycol (107-21-1)

##### Hazardous Substances and New Organisms Act

HSNO Approval Number	HSR001534
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#### dibenzoyl peroxide (94-36-0)

##### Hazardous Substances and New Organisms Act

HSNO Approval Number	HSR001372(dilution) HSR007398(dilution)
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### 15.2. International agreements

No additional information available



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### SECTION 16: Other information

Revision date : 01/05/2019

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

Full text of H-statements	
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
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation

For professional use only.

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