

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

#### 1.1. Product identifier

Product form : Mixture  
 Trade name : REFACE POLYESTER SPRAY FILLER HARDENER  
 Product code : HAR/SF

#### 1.2. Other means of identification

No additional information available

#### 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 Amera 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)

Flammable liquids, Category 2 H225  
 Organic Peroxides, Type D H242  
 Skin corrosion/irritation, Category 1B H314  
 Serious eye damage/eye irritation, Category 1 H318  
 Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation H335  
 Specific target organ toxicity — Single exposure, Category 3, Narcosis H336

#### 2.2. Label elements

Hazard pictograms (GHS AU) :



Signal word (GHS AU) : Danger  
 Contains : ethyl acetate (30-60 %); cyclohexanone, peroxide (10-30 %); cyclohexanone (< 5 %)  
 Hazard statements (GHS AU) : H225 - Highly flammable liquid and vapour.  
 H242 - Heating may cause a fire.  
 H314 - Causes severe skin burns and eye damage.  
 H335 - May cause respiratory irritation.  
 H336 - May cause drowsiness or dizziness.  
 Precautionary statements (GHS AU) : P210 - Keep away from heat, hot surfaces, open flames, sparks. No smoking.  
 P234 - Keep only in original container.  
 P260 - Do not breathe vapours, spray, fume.  
 P280 - Wear protective gloves, protective clothing, face protection.  
 P403+P235 - Store in a well-ventilated place. Keep cool.  
 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

# REFACE POLYESTER SPRAY FILLER 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)
ethyl acetate ( )	141-78-6	30-60	Flam. Liq. 2, H225 STOT SE 3, H336
cyclohexanone, peroxide ( )	12262-58-7	10-30	Org. Perox. A, H240 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314
cyclohexanone ( )	108-94-1	< 5	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Dam. 1, H318
Other substances (not contributing to the classification of this product)		82 - 86.67	

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
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	: Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.
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.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately.

#### 4.2. Symptoms caused by exposure

Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

#### 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. Carbon dioxide.
------------------------------	--

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

Fire hazard	: Highly flammable liquid and vapour. 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.
Hazchemcode	: 2WE

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures	: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Do not breathe vapours, spray, 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

Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
-------------------------	---

# REFACE POLYESTER SPRAY FILLER HARDENER

## Safety Data Sheet

according to the Model Work Health and Safety Regulations

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

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe vapours, spray, fume.
- Hygiene measures : 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

- Technical measures : Ground/bond container and receiving equipment.
- Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from other materials. Protect from sunlight. Keep only in original container. Store locked up.
- Incompatible materials : combustible materials.
- Storage temperature :  $\leq 25\text{ }^{\circ}\text{C}$

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters - exposure standards

ethyl acetate (141-78-6)		
Australia	Local name	Ethyl acetate (Acetic acid ethyl ester; Acetic ester)
Australia	TWA (mg/m <sup>3</sup> )	720 mg/m <sup>3</sup>
Australia	TWA (ppm)	200 ppm
Australia	STEL (mg/m <sup>3</sup> )	1440 mg/m <sup>3</sup>
Australia	STEL (ppm)	400 ppm
New Zealand	Local name	Ethyl acetate
New Zealand	TWA (mg/m <sup>3</sup> )	720 mg/m <sup>3</sup>
New Zealand	TWA (ppm)	200 ppm
New Zealand	Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 9th Edition

cyclohexanone (108-94-1)		
Australia	Local name	Cyclohexanone
Australia	TWA (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup>
Australia	TWA (ppm)	25 ppm
Australia	Remark (AU)	Sk - Absorption through the skin may be a significant source of exposure.
New Zealand	Local name	Cyclohexanone
New Zealand	TWA (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup>
New Zealand	TWA (ppm)	25 ppm
New Zealand	Remark (NZ)	skin (Skin absorption)
New Zealand	Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 8th Edition

#### 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

- Hand protection : Protective gloves
- Eye protection : Safety glasses
- Skin and body protection : Wear suitable protective clothing
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment

# REFACE POLYESTER SPRAY FILLER HARDENER

## Safety Data Sheet

according to the Model Work Health and Safety Regulations

Environmental exposure controls : Avoid release to the environment.

### SECTION 9: Physical and chemical properties

Physical state	: Liquid
Appearance	:
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	: Melting point : Not applicable
Boiling point	: No data available
Flash point	: 6 °C
Auto-ignition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: Vapour pressure : 4 kPa
Relative density	: No data available
Density	: Density : 1.02 g/m <sup>3</sup>
Solubility	: partly miscible.
Log Pow	: No data available
Viscosity, kinematic	: ≈ 2941176.471 mm <sup>2</sup> /s
Viscosity, dynamic	: ≈ 3 mPa·s
Explosive properties	: No data available
Explosive limits	: No data available
Minimum ignition energy	: No data available
SADT	: 50 °C
VOC content - Regulatory	: No data available

### SECTION 10: Stability and reactivity

Reactivity	: Highly flammable liquid and vapour. Heating may cause a fire.Highly flammable liquid and vapour. Heating may cause a fire.
Chemical stability	: Stable under normal conditions.
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	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### SECTION 11: Toxicological information

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

ethyl acetate (141-78-6)	
LD50 oral rat	10200 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Female, Experimental value, Oral)
LD50 dermal rabbit	> 20000 mg/kg bodyweight (24 hour cuff method, 24 h, Rabbit, Male, Experimental value, Dermal)
cyclohexanone, peroxide (12262-58-7)	
LD50 oral rat	880 mg/kg bodyweight (Rat, Literature study, Oral)
LC50 inhalation rat (mg/l)	> 5 mg/l (Rat, Literature study, Inhalation)
cyclohexanone (108-94-1)	
LD50 oral rat	1890 mg/kg bodyweight (BASF test, Rat, Experimental value, Oral, 7 day(s))
LD50 dermal rabbit	1100 mg/kg (BRENNTAG test)
LC50 inhalation rat (mg/l)	> 6.2 mg/l air (BASF test, 4 h, Rat, Male/female, Experimental value, Inhalation (vapours))
LC50 inhalation rat (Vapours - mg/l/4h)	8000 mg/l/4h

# REFACE POLYESTER SPRAY FILLER HARDENER

## Safety Data Sheet

according to the Model Work Health and Safety Regulations

Skin corrosion/irritation	: Causes severe skin burns and eye damage.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation. May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

### REFACE POLYESTER SPRAY FILLER HARDENER

Viscosity, kinematic	≈ 2941176.471 mm <sup>2</sup> /s
----------------------	----------------------------------

## 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	: Before neutralisation, the product may represent a danger to aquatic organisms.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified
Other information	: Avoid release to the environment.

#### ethyl acetate (141-78-6)

LC50 fish 1	230 mg/l (US EPA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
EC50 Daphnia 1	154 mg/l (48 h, Daphnia magna, Literature)
BCF fish 1	30 (3 day(s), Leuciscus idus, Static system, Experimental value)
Log Pow	0.68 (Experimental value, EPA OPPTS 830.7560, 25 °C)

#### cyclohexanone, peroxide (12262-58-7)

LC50 fish 1	48 mg/l (96 h, Danio rerio, Literature study)
-------------	---

#### cyclohexanone (108-94-1)

LC50 fish 1	527 - 732 mg/l (US EPA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
EC50 Daphnia 1	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Read-across, GLP)
ErC50 (algae)	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Read-across, GLP)
BCF other aquatic organisms 1	2.4 (QSAR)
Log Pow	0.86 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Log Koc	1.18 (log Koc, SRC PCKOCWIN v1.66, Calculated value)

### 12.2. Persistence and degradability

#### REFACE POLYESTER SPRAY FILLER HARDENER

Persistence and degradability	Not established.
-------------------------------	------------------

#### ethyl acetate (141-78-6)

Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.293 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.69 g O <sub>2</sub> /g substance
ThOD	1.82 g O <sub>2</sub> /g substance

#### cyclohexanone, peroxide (12262-58-7)

Persistence and degradability	Readily biodegradable in water.
-------------------------------	---------------------------------

#### cyclohexanone (108-94-1)

Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.232 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.605 g O <sub>2</sub> /g substance
ThOD	2.605 g O <sub>2</sub> /g substance

# REFACE POLYESTER SPRAY FILLER HARDENER

## Safety Data Sheet

according to the Model Work Health and Safety Regulations

### 12.3. Bioaccumulative potential

REFACE POLYESTER SPRAY FILLER HARDENER	
Bioaccumulative potential	Not established.
ethyl acetate (141-78-6)	
BCF fish 1	See section 12.1 on ecotoxicology
Log Pow	See section 12.1 on ecotoxicology
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
cyclohexanone, peroxide (12262-58-7)	
Bioaccumulative potential	No bioaccumulation data available.
cyclohexanone (108-94-1)	
BCF other aquatic organisms 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 (Log Kow < 4).

### 12.4. Mobility in soil

ethyl acetate (141-78-6)	
Surface tension	0.024 N/m (20 °C)
Log Pow	See section 12.1 on ecotoxicology
Ecology - soil	Low potential for adsorption in soil.
cyclohexanone, peroxide (12262-58-7)	
Ecology - soil	No (test) data on mobility of the substance available.
cyclohexanone (108-94-1)	
Surface tension	0.034 N/m (20 °C)
Log Pow	See section 12.1 on ecotoxicology
Log Koc	See section 12.1 on ecotoxicology
Ecology - soil	Highly mobile in soil.

### 12.5. Other adverse effects

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

REFACE POLYESTER SPRAY FILLER HARDENER	
Fluorinated greenhouse gases	False
ethyl acetate (141-78-6)	
Fluorinated greenhouse gases	False
cyclohexanone, peroxide (12262-58-7)	
Fluorinated greenhouse gases	False
cyclohexanone (108-94-1)	
Fluorinated greenhouse gases	False

## SECTION 13: Disposal considerations

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Additional information : Flammable vapours may accumulate in the container.

## SECTION 14: Transport information

### 14.1. UN number

UN-No. (ADG) : 3105  
UN-No. (IMDG) : 3105  
UN-No. (IATA) : 3105

### 14.2. Proper Shipping Name - Addition

Proper Shipping Name (ADG) : ORGANIC PEROXIDE TYPE D, LIQUID  
Proper Shipping Name (IMDG) : ORGANIC PEROXIDE TYPE D, LIQUID  
Proper Shipping Name (IATA) : Organic peroxide type d, liquid

### 14.3. Transport hazard class(es)

#### ADG

Transport hazard class(es) (ADG) : 5.2

# REFACE POLYESTER SPRAY FILLER HARDENER

## Safety Data Sheet

according to the Model Work Health and Safety Regulations

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

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) : 3105

Special provision (ADG) : 122, 274, 323

Limited quantities (ADG) : 125ml

Packing instructions (ADG) : P520

#### Transport by sea

UN-No. (IMDG) : 3105

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. Immiscible with water except for acetyl acetone peroxide, tert-butylhydroperoxide and peroxyacetic acid, type D, stabilized. Contact with the eyes and skin should be avoided. May evolve irritant or toxic fumes.

#### Air transport

UN-No. (IATA) : 3105

# REFACE POLYESTER SPRAY FILLER HARDENER

## Safety Data Sheet

according to the Model Work Health and Safety Regulations

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)	: 5L
CAO packing instructions (IATA)	: 570
CAO max net quantity (IATA)	: 10L
Special provisions (IATA)	: A20, A150, A802
ERG code (IATA)	: 5L

### 14.8. Hazchem or Emergency Action Code

Hazchemcode : 2WE

## SECTION 15: Regulatory information

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

No additional information available

#### Hazardous Substances and New Organisms Act

HSNO Approval Number : HSR002663  
Group standard : Surface coatings and colourants

### 15.2. International agreements

No additional information available

## SECTION 16: Any other relevant information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Revision date : 03/05/2019

Other information : None.

Classification:

Flam. Liq. 2	H225
Org. Perox. D	H242
Skin Corr. 1B	H314
Eye Dam. 1	H318
STOT SE 3	H335
STOT SE 3	H336

Full text of H-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Org. Perox. A	Organic Peroxides, Type A
Org. Perox. D	Organic Peroxides, Type D
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H240	Heating may cause an explosion.
H242	Heating may cause a fire.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.



# REFACE POLYESTER SPRAY FILLER HARDENER

## Safety Data Sheet

according to the Model Work Health and Safety Regulations

H336	May cause drowsiness or dizziness.
------	------------------------------------

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.*