

## Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations
Issue date: 28/02/2017 Revision date: 3/05/2019 Supersedes: 2/10/2018 Version: 3.1

#### **SECTION 1: Product identifier**

#### 1.1. GHS Product identifier

Product form : Mixture

Trade name : ISOPON FASTGLAS RESIN Product code : RE/LA, RE/SM, RE/XL

#### 1.2. Other means of identification

Other means of identification : Component of: GL/LA/D, GL/SM/D

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

Recommended use : Coating

#### 1.4. Details of manufacturer or importer

Supplier Supplier

U-POL Australia Pty Limited Ltd U-POL New Zealand Limited Ltd

55 Leland Street c/o Lindsay & Associates Unit H, 12 Amera Place, East Tamaki

Penrith NSW 2750 Manukau City Auckland 2013

Australia New Zealand

T 02 4731 2655 - F 02 4731 2611 T + 612 4731 2655 / 027 630 3691 - F + 612 4731 2611

info@u-pol.com.au - www.u-pol.com info@u-pol.co.nz - 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)

Flammable liquids, Category 3 H226
Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 2A H319
Reproductive toxicity, Category 2 H361
Specific target organ toxicity – Single exposure, Category 3, Respiratory H335

tract irritation

Specific target organ toxicity – Repeated exposure, Category 1 H372

#### 2.2. GHS Label elements, including precautionary statements

Hazard pictograms (GHS AU)







Flame

: Danger

Exclamation Health hazard mark

Signal word (GHS AU)

Contains : styrene (30 – 60 %)

Hazard statements (GHS AU) : H226 - Flammable liquid and vapour

H315 - Causes skin irritation

H319 - Causes serious eye irritation H335 - May cause respiratory irritation

H361 - Suspected of damaging the unborn child

H372 - Causes damage to organs (hearing organs) through prolonged or repeated

exposure (inhalation)

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Precautionary statements (GHS AU)

: P102 - Keep out of reach of children.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking. heat, hot surfaces, open flames, sparks

P260 - Do not breathe fume, vapours.

P264 - Wash hands thoroughly after handling.

P280 - Wear eye protection, protective gloves, protective clothing. P308+P313 - IF exposed or concerned: Get medical attention. P337+P313 - If eye irritation persists: Get medical attention.

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)
styrene	100-42-5	30 – 60	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Repr. 2, H361 STOT SE 3, H335 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
Other substances (not contributing to the classification of this product)	-	62	-

#### **SECTION 4: First aid measures**

#### 4.1. Description of necessary first-aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.

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. If skin

irritation 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 inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Irritation.

#### 4.3. Medical attention and special treatment

Other medical advice or treatment : Treat symptomatically.

#### **SECTION 5: Fire-fighting measures**

#### 5.1. Extinguishing media

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

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#### 5.2. Specific hazards arising from the chemical

Fire hazard : Flammable liquid and vapour. Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 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.

Hazchem Code : 3YE

#### **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. Do not breathe

vapours, fume. Avoid contact with skin and eyes.

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 : Contain released product, collect/pump into suitable containers. Collect spillage.

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

public waters.

#### **SECTION 7: Handling and storage**

#### 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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe vapours, fume. Use only outdoors or in a

well-ventilated area. Avoid contact with skin and eyes.

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 locked up.

Incompatible products : Oxidizing agent.
Storage temperature : < 25 °C

Storage area : Store in a well-ventilated place.

# SECTION 8: Exposure controls and personal protection

#### 8.1. Control parameters - exposure standards

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styrene (100-42-5)		
Australia - Occupational Exposure Limits		
Local name	Styrene, monomer (Phenylethylene; Vinyl benzene)	
OES TWA [1]	213 mg/m³	
OES TWA [2]	50 ppm	
OES STEL	426 mg/m³	
OES STEL [ppm]	100 ppm	
Regulatory reference	Workplace exposure standards for airborne contaminants (2019)	
New Zealand - Occupational Exposure Limits		
Local name	Phenylethylene (Styrene monomer, Vinyl benzene)	
WES-TWA (OEL TWA) [1]	85 mg/m³	
WES-TWA (OEL TWA) [2]	20 ppm	
WES-STEL (OEL STEL)	170 mg/m³	
WES-STEL (OEL STEL) [ppm]	40 ppm	
Remark (NZ)	6.7B (Suspected carcinogen)	
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition	
New Zealand - Biological Exposure Indices		
Local name	Styrene	
BEI	400 mg/g creatinine Parameter: Mandelic acid plus phenylglyoxylic acid - Medium: Urine - Sampling time: End of shift 40 μg/l Parameter: Styrene - Medium: Urine - Sampling time: End of shift	
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.

#### 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

Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Protective gloves	Nitrile rubber (NBR)	3 (> 60 minutes)	0.3		EN 374-3

Eye protection : Safety glasses

Skin and body protection : Wear suitable protective clothing

Туре	Standard

Respiratory protection : [In case of inadequate ventilation] wear respiratory protection.

Device	Filter type	Condition	Standard
Breathing apparatus	Type A - High-boiling (>65 °C) organic compounds		EN 14387

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#### Personal protective equipment symbol(s)









Environmental exposure controls : Avoid release to the environment.

#### **SECTION 9: Physical and chemical properties**

Physical state : Liquid
Appearance : Liquid.
Colour : dark yellow
Odour : characteristic
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point / Freezing point : Melting point: -30 °C

Boiling point :  $145 \, ^{\circ}\text{C}$  Flash point :  $31 \, ^{\circ}\text{C}$ 

Auto-ignition temperature : No data available
Flammability : No data available
Vapour pressure : Vapour pressure: 6 hPa

Relative density : Relative vapour density at 20°C: 3.6

Density: 1.09 g/cm<sup>3</sup>

Solubility : Insoluble in water. Soluble in aromatic hydrocarbons.

Partition coefficient n-octanol/water (Log Pow) : No data available
Viscosity, kinematic : 477 − 624 mm²/s
Viscosity, dynamic : ≈ 600 (520 − 680) mPa.s
Explosive properties : No data available
Explosive limits : No data available
Minimum ignition energy : No data available

VOC content : 345 g/l

VOC content - Regulatory : No data available

Percent Solids : 0 wt%

#### **SECTION 10: Stability and reactivity**

Reactivity : Flammable liquid and vapour.
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 : No additional information available

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

styrene (100-42-5)	
LD50 oral rat	5000 mg/kg bodyweight (Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	11.8 mg/l (4 h, Rat, Inconclusive, insufficient data, Inhalation (vapours))

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styrene (100-42-5)		
ATE AU (gases)		4500 ppmv/4h
ATE AU (vapours)		11 mg/l/4h
ATE AU (dust,mist)		1.5 mg/l/4h
Skin corrosion/irritation	: C	Causes skin irritation.
Serious eye damage/irritation	: C	Causes serious eye irritation.
Respiratory or skin sensitisation	: N	Not classified
Germ cell mutagenicity	: N	Not classified
Carcinogenicity	: N	Not classified
Reproductive toxicity	: 8	Suspected of damaging the unborn child.
STOT-single exposure	: 1	May cause respiratory irritation.
styrene (100-42-5)		
STOT-single exposure		May cause respiratory irritation.
STOT-repeated exposure		Causes damage to organs (hearing organs) through prolonged or repeated exposure inhalation).
styrene (100-42-5)		
LOAEL (oral, rat, 90 days)	:	2000 mg/kg bodyweight Animal: rat
LOAEC (inhalation, rat, vapour, 90 days)		0.21 mg/l air Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
NOAEL (oral, rat, 90 days)		1000 mg/kg bodyweight Animal: rat
NOAEL (subchronic, oral, animal/male, 90 days)		10 mg/kg bodyweight Animal: mouse, Animal sex: male
STOT-repeated exposure		Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	: N	lot classified.
ISOPON FASTGLAS RESIN		
Viscosity, kinematic		477 – 624 mm²/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

: The product is not considered harmful to aquatic organisms nor to cause long-term adverse Ecology - general

effects in the environment.

Hazardous to the aquatic environment, short-term

(acute)

: Not classified

Hazardous to the aquatic environment, long-term (chronic)

: Not classified

styrene (100-42-5)	
LC50 - Fish [1]	10 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	4.7 mg/l Test organisms (species): Daphnia magna
ErC50 algae	4.9 mg/l (EPA OTS 797.1050, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Growth rate)
LOEC (chronic)	2.06 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	1.01 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
BCF - Fish [1]	74 (Calculated value)
Partition coefficient n-octanol/water (Log Pow)	2.96 (Practical experience/observation, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)

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styrene (100-42-5)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.55 (log Koc, Estimated value)

#### 12.2. Persistence and degradability

styrene (100-42-5)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Chemical oxygen demand (COD)	2.8 g O <sub>2</sub> /g substance
ThOD	3.07 g O₂/g substance
BOD (% of ThOD)	0.42 (Literature study)

# 12.3. Bioaccumulative potential

styrene (100-42-5)	
BCF - Fish [1]	74 (Calculated value)
Partition coefficient n-octanol/water (Log Pow)	2.96 (Practical experience/observation, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.55 (log Koc, Estimated value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

#### 12.4. Mobility in soil

styrene (100-42-5)		
Surface tension	No data available in the literature	
Partition coefficient n-octanol/water (Log Pow)	2.96 (Practical experience/observation, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	See section 12.1 on ecotoxicology2.55 (log Koc, Estimated value)	
Ecology - soil	Low potential for adsorption in soil.	

#### 12.5. Other adverse effects

Ozone : Not classified

Other adverse effects : No additional information available

ISOPON FASTGLAS RESIN		
Fluorinated greenhouse gases	False	
styrene (100-42-5)		
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.

Additional information : Flammable vapours may accumulate in the container.

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## **SECTION 14: Transport information**

#### 14.1. UN number

UN-No. (ADG) : 1866 UN-No. (IMDG) : 1866 UN-No. (IATA) : 1866

#### 14.2. UN Proper Shipping Name

Proper Shipping Name (ADG) : RESIN SOLUTION, flammable

Proper Shipping Name (IMDG) : RESIN SOLUTION Proper Shipping Name (IATA) : Resin solution

#### 14.3. Transport hazard class(es)

#### **ADG**

Transport hazard class(es) (ADG) : 3
Danger labels (ADG) : 3



#### **IMDG**

Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3



#### IATA

Transport hazard class(es) (IATA) : 3
Danger labels (IATA) : 3



#### 14.4. Packing group

Packing group (ADG) : III - Substances presenting low danger

Packing group (IMDG) : III
Packing group (IATA) : III

# 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

# 14.7. Additional information

Other information : No supplementary information available

Transport by road and rail

UN-No. (ADG) : 1866

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Special provision (ADG) : 223 Limited quantities (ADG) : 5I

Packing instructions (ADG) : P001, LP01, IBC03

Special packing provisions (ADG) : PP1
Portable tank and bulk container instructions (ADG) : T2
Portable tank and bulk container special provisions : TP1

(ADG)

Transport by sea

UN-No. (IMDG) : 1866
Special provisions (IMDG) : 223, 955
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : P001, LP01
Special packing provisions (IMDG) : PR1

Special packing provisions (IMDG): PP1IBC packing instructions (IMDG): IBC03Tank instructions (IMDG): T2Tank special provisions (IMDG): TP1

EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS EmS-No. (Spillage) : S-E - SPILLAGE SCHEDULE Echo - FLAMMABLE LIQUIDS, FLOATING ON WATER

Stowage category (IMDG) : A

Properties and observations (IMDG) : Miscibility with water depends upon the composition.

Air transport

: 1866 UN-No. (IATA) : E1 PCA Excepted quantities (IATA) PCA Limited quantities (IATA) : Y344 PCA limited quantity max net quantity (IATA) : 10L PCA packing instructions (IATA) : 355 PCA max net quantity (IATA) : 60L CAO packing instructions (IATA) : 366 CAO max net quantity (IATA) : 220L Special provisions (IATA) : A3 ERG code (IATA) : 3L

#### 14.8. Hazchem or Emergency Action Code

Hazchem Code : 3YE

#### **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)

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

Scheduling of Medicines and Poisons (SUSMP) Poisons
Relevant Poisons Schedule number : Schedule 5

**Hazardous Substances and New Organisms Act** 

HSNO Approval Number : HSR002662

Group standard : Surface coatings and colourants

styrene (100-42-5)		
Hazardous Substances and New Organisms Act		
HSNO Approval Number	HSR001221	

# phthalic anhydride (85-44-9) Hazardous Substances and New Organisms Act HSNO Approval Number HSR003066

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#### 15.2. International agreements

No additional information available

#### **SECTION 16: Other information**

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Classification	
Flam. Liq. 3	H226
Skin Irrit. 2	H315
Eye Irrit. 2A	H319
Repr. 2	H361
STOT SE 3	H335
STOT RE 1	H372

Full text of H-statements	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. 3	Flammable liquids, Category 3
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H361	Suspected of damaging fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H412	Harmful to aquatic life with long lasting effects

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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.