

Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations Issue date: 1/02/2017 Revision date: 3/05/2019 Supersedes: 15/10/2018 Version: 2.1

SECTION 1: Product identifier

1.1. GHS Product identifier

Product form : Mixture

PLASTIKIT RESIN Trade name Product code RE/2.5, RE/5

1.2. Other means of identification

Other means of identification : Component of: PK1

1.3. Recommended use of the chemical and restrictions on use

: Coating Recommended use

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 H315 Skin corrosion/irritation, Category 2 Serious eye damage/eye irritation, Category 2A H319 Skin sensitisation, Category 1 H317 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

Exclamation Health hazard

mark

Signal word (GHS AU)

Contains : styrene (30 - 60 %); cobalt(II) 2-ethylhexanoate (< 10 %)

: Danger

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

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation H335 - May cause respiratory irritation

H361 - Suspected of damaging the unborn child

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

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

P260 - Do not breathe fume, vapours. P264 - Wash hands thoroughly after handling.

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

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
cobalt(II) 2-ethylhexanoate	136-52-7	< 10	Acute Tox. 5 (Oral), H303 Eye Irrit. 2A, H319 Skin Sens. 1A, H317 Repr. 1B, H360 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
Other substances (not contributing to the classification of this product)	-	49 – 70	-

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.

: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a First-aid measures after inhalation

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 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 inhalation : May cause respiratory irritation.

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

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. Carbon dioxide.

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

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe

vapours, spray, 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

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, spray, fume. Use only outdoors or

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

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be

allowed out of the workplace. 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.

Storage temperature : < 25 °C

Storage area : Store in a well-ventilated place. Special rules on packaging : Keep only in original container.

Packaging materials : MATERIAL TO AVOID: copper, Brass, Copper alloys.

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SECTION 8: Exposure controls and personal protection

8.1. Control parameters - exposure standards

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)

Materials for protective clothing : Impermeable clothing Hand protection : Protective gloves 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. [In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s)







Environmental exposure controls : Avoid release to the environment.

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SECTION 9: Physical and chemical properties

Physical state : Liquid

Appearance : No data available

Colour : brown
Odour
Odour threshold : characteristic
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point / Freezing point : No data available
Boiling point : No data available

Flash point : 31 °C

Auto-ignition temperature : No data available
Flammability : No data available
Vapour pressure : Vapour pressure: 6.7 hPa
Relative density : No data available

Density : No data available : Density: 1.11 g/cm³

Solubility : insoluble in water. Soluble in aromatic hydrocarbons.

Partition coefficient n-octanol/water (Log Pow) : No data available Viscosity, kinematic : 990.991 mm²/s

Viscosity, dynamic : 1100 (900 – 1200) cP @ 20°C

Explosive properties : No data available
Oxidising properties : Not applicable
Explosive limits : No data available
Minimum ignition energy : No data available

VOC content : 407 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

Acute toxicity (innatation)	. 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))
ATE AU (gases)	4500 ppmv/4h
ATE AU (vapours)	11 mg/l/4h
ATE AU (dust,mist)	1.5 mg/l/4h
cobalt(II) 2-ethylhexanoate (136-52-7)	
LD50 oral rat	3129 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure), 95% CI: 1750 - 5000

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> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
3129 mg/kg bodyweight
: Causes skin irritation.
: Causes serious eye irritation.
: May cause an allergic skin reaction.
: Not classified
: Not classified
: Suspected of damaging the unborn child.
: May cause respiratory irritation.
May cause respiratory irritation.
: Causes damage to organs (hearing organs) through prolonged or repeated exposure (inhalation).
2000 mg/kg bodyweight Animal: rat
0.21 mg/l air Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
1000 mg/kg bodyweight Animal: rat
10 mg/kg bodyweight Animal: mouse, Animal sex: male
Causes damage to organs through prolonged or repeated exposure.
: Not classified.
990.991 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

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

effects in the environment.

Hazardous to the aquatic environment, short-term

(acute)

: Not classified

Hazardous to the aquatic environment, long-term : Not classified

(chronic)

,	
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)
cobalt(II) 2-ethylhexanoate (136-52-7)	
LC50 - Fish [1]	1.512 mg/l (ASTM, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Readacross)
LC50 - Fish [2]	54.1 mg/l (ASTM, 96 h, Pimephales promelas, Flow-through system, Fresh water, Readacross)
EC50 - Other aquatic organisms [1]	1703 mg/kg dwt (ASTM, 28 day(s), Tubifex tubifex, Semi-static system, Fresh water, Read-across, Reproduction)
ErC50 algae	144 μg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Read-across, GLP)
NOEC chronic crustacea	0.608 mg/l (21 d, Daphnia magna (Water flea), reproduction rate, OECD Test Guideline 211)
BCF - Fish [1]	1.2 (131 day(s), Seriola quinqueradiata, Static system, Salt water, Read-across, Fresh weight)

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 ₂ /g substance	
ThOD	3.07 g O₂/g substance	
BOD (% of ThOD)	0.42 (Literature study)	
cobalt(II) 2-ethylhexanoate (136-52-7)		
Persistence and degradability	Readily biodegradable in water.	

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).	
cobalt(II) 2-ethylhexanoate (136-52-7)		
BCF - Fish [1]	1.2 (131 day(s), Seriola quinqueradiata, Static system, Salt water, Read-across, Fresh weight)	
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)	

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styrene (100-42-5)		
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.	
cobalt(II) 2-ethylhexanoate (136-52-7)		
Surface tension	64 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)	
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

PLASTIKIT RESIN	
Fluorinated greenhouse gases	False
styrene (100-42-5)	
Fluorinated greenhouse gases	False
cobalt(II) 2-ethylhexanoate (136-52-7)	
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.

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
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

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

Packing instructions (ADG) : P001, IBC03, LP01

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
Packing instructions (IMDG) : P001, LP01
Special packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T2
Tank 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

UN-No. (IATA) : 1866
PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y344
PCA limited quantity max net quantity (IATA) : 10L
PCA packing instructions (IATA) : 355
PCA max net quantity (IATA) : 60L

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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

No additional information available

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

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
Skin Sens. 1	H317
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
Acute Tox. 5 (Oral)	Acute toxicity (oral), Category 5
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
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. 1B	Reproductive toxicity, Category 1B
Repr. 2	Reproductive toxicity, Category 2

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Full text of H-statements	
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A
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
H303	May be harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H360	May damage fertility or the unborn child
H361	Suspected of damaging fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects

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