

Safety Data Sheet

according to the Model Work Health and Safety Regulations

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SECTION 1: Identification: Product identifier and chemical identity

1.1. Product identifier

Product form : Mixture

Trade name : U-POL TIGER SEAL - GREY

Product code : TIG/GG

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Adhesives, sealants

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 - 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 - 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)

Respiratory sensitisation, Category 1 H334

2.2. Label elements

Hazard pictograms (GHS AU)



Signal word (GHS AU) : Danger

Contains : 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate (< 5 %); 4,4'-

methylenediphenyl diisocyanate, oligomers (< 5 %)

Hazard statements (GHS AU) : H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements (GHS AU) : P261 - Avoid breathing fume, vapours.

P264 - Wash hands thoroughly after handling.

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

P302+P352 - IF ON SKIN: Wash with plenty of water P312 - Call a POISON CENTER/doctor if you feel unwell.

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)
diisononyl phthalate ()	28553-12-0	5 - 23	Not classified
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate ()	101-68-8	< 5	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2 H373

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Name	CAS-No.	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
4,4'-methylenediphenyl diisocyanate, oligomers ()	25686-28-6	< 5	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373
Other substances (not contributing to the classification of this product)		79.3 - 90	

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.

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 : Wash skin with plenty of water.

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.

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

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Self-contained breathing apparatus. Do not attempt to take action without suitable protective

equipment. Complete protective clothing.

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

Methods for cleaning up : Mechanically recover the product.

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

7.1. Precautions for safe handling

Precautions for safe handling : Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid

breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures : 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 locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Storage temperature : < 25 °C

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Storage area : Keep out of direct sunlight. Store in a well-ventilated place. Protect against frost. Store in a dry

area.

Special rules on packaging : Store in a closed container. Keep only in original container. dry.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters - exposure standards

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate (101-68-8)		
Australia	Local name	Methylene bisphenyl isocyanate (MDI) (Diphenylmethane diisocyanate)
Australia	TWA (mg/m³)	0.02 mg/m ³
Australia	STEL (mg/m³)	0.07 mg/m³
Australia	Remark (AU)	Carcinogenicity Category 2 – Suspected human carcinogen. The classification of a chemical into this category is on the basis of evidence from human and animal studies, where the evidence is not sufficiently convincing to place the chemical into Category 1 or from limited evidence of carcinogenicity in human or animal studies; Sen - Respiratory and/or Skin Sensitiser.
New Zealand	Local name	Diphenylmethane diisocyanate (Isocyanates)
New Zealand	TWA (mg/m³)	0.02 mg/m³
New Zealand	STEL (mg/m³)	0.07 mg/m³
New Zealand	Regulatory reference	Worplace Exposure Standards and Biological Exposure Indices, 9th Edition

diisononyl phthalate (28553-12-0)		
New Zealand	Local name	Diisononyl phthalate
New Zealand	TWA (mg/m³)	5 mg/m³
New Zealand	Regulatory reference	Worplace Exposure Standards and Biological Exposure Indices, 9th 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

Personal protective equipment : Gloves. Protective clothing. Safety glasses.

Materials for protective clothing : Impermeable clothing

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

Personal protective equipment symbol(s)







Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

Physical state : Solid

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Solubility

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Relative evaporation rate (butylacetate=1)

Appearance : Paste.

Colour : No data available
Odour threshold : No data available
pH : No data available
No data available
No data available

Melting point / Freezing point : Freezing point : Not applicable

Boiling point : No data available
Flash point : > 100 °C
Auto-ignition temperature : > 200 °C

Flammability (solid, gas) : No data available

Vapour pressure : Vapour pressure : < 100 hPa @ 20°C

Relative density : No data available

Density : ≈ 1.22 g/cm³

Relative density: Not applicable: insoluble in water. Reacts with water.

: No data available

Log Pow : No data available

Viscosity, dynamic : ≈

Explosive properties : No data available
Explosive limits : Not applicable
Minimum ignition energy : No data available
VOC content - Regulatory : No data available

SECTION 10: Stability and reactivity

Reactivity : The product is non-reactive under normal conditions of use, storage and transport. The product

is non-reactive under normal conditions of use, storage and transport

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : No dangerous reactions known under normal conditions of use.

Conditions to avoid : None under recommended storage and handling conditions (see section 7).

Hazardous decomposition products : Hydrogen chloride. Nitrogen oxides. Sulphur oxides.

SECTION 11: Toxicological information

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

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate (101-68-8)		
LD50 oral rat	> 7616 mg/kg (Equivalent or similar to OECD 401, Rat, Female, Read-across, Oral)	
LD50 dermal rabbit	> 9400 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male/female, Read-across, Dermal)	
LC50 inhalation rat (mg/l)	0.49 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male/female, Read-across, Inhalation (aerosol))	
diisononyl phthalate (28553-12-0)		
LD50 oral rat	> 5000 mg/kg (Rat, Literature study, Oral)	
LD50 dermal rabbit	> 3160 mg/kg bodyweight (24 h, Rabbit, Female, Experimental value, Dermal)	
LC50 inhalation rat (mg/l)	> 4.4 mg/l air (Other, 4 h, Rat, Male/female, Experimental value, Inhalation (aerosol))	

Skin corrosion/irritation : Not classified Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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

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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.

Acute aquatic toxicity : Not classified Chronic aquatic toxicity : Not classified

4,4'-methylenediphenyl diisocy	anate; diphenylmethane-4,4'-diisocyanate (101-68-8)
LC50 fish 1	> 1000 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Read-across, Nominal concentration)
EC50 Daphnia 1	129.7 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 24 h, Daphnia magna, Static system, Fresh water, Read-across, Locomotor effect)
BCF fish 1	92 - 200 (OECD 305: Bioconcentration: Flow-Through Fish Test, 4 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value, GLP)
Log Pow	5.22 (Estimated value)
diisononyl phthalate (28553-12	0)
LC50 fish 1	> 100 mg/l (EU Method C.1, 96 h, Brachydanio rerio, Semi-static system, Fresh water, Experimental value, GLP)
EC50 Daphnia 1	> 74 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
BCF fish 1	< 3 (14 day(s), Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value)
Log Pow	8.8 - 9.7 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Log Koc	6 (log Koc. SRC PCKOCWIN v2.0. Calculated value)

12.2. Persistence and degradability

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate (101-68-8)	
Persistence and degradability	Not readily biodegradable in water.
diisononyl phthalate (28553-12-0)	
Persistence and degradability Biodegradable in the soil. Inherently biodegradable. Readily biodegradable in water.	

12.3. Bioaccumulative potential

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate (101-68-8)	
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).
diisononyl phthalate (28553-12-0)	
BCF fish 1	See section 12.1 on ecotoxicology
Log Pow	See section 12.1 on ecotoxicology

High potential for bioaccumulation (Log Kow > 5)

Bioaccumulative potential 12.4. Mobility in soil

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate (101-68-8)	
Surface tension	Data waiving
Log Pow	See section 12.1 on ecotoxicology
Ecology - soil	No (test)data on mobility of the substance available.
diisononyl phthalate (28553-12-0)	
Log Pow	See section 12.1 on ecotoxicology
Log Koc	See section 12.1 on ecotoxicology
Ecology - soil	Adsorbs into the soil. Low potential for mobility in soil.

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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4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate (101-68-8)	
Fluorinated greenhouse gases	False
4,4'-methylenediphenyl diisocyanate, oligomers (25686-28-6)	
Fluorinated greenhouse gases	False
diisononyl phthalate (28553-12-0)	
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

14.1. UN number

Not regulated for transport

14.2. Proper Shipping Name - Addition

Not applicable

14.3. Transport hazard class(es)

ADG

Transport hazard class(es) (ADG) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

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

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

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

No additional information available

Hazardous Substances and New Organisms Act

HSNO Approval Number : HSR002679

Group standard : Surface coatings and colourants

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xylene (1330-20-7)

Hazardous Substances and New Organisms Act

HSNO Approval Number HSR000983

International agreements

No additional information available

SECTION 16: Any other relevant information

Revision date : 03/05/2019

Classification:

H334 Resp. Sens. 1

Full tout of LL statements.

Full text of H-statements:	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

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