



TIGERSEAL PU ADHESIVE & SEALANT - BLACK

Safety Data Sheet

according to the Model Work Health and Safety Regulations

DRIVING SURFACE PERFECTION

Issue date:14/12/2016

Revision date:26/03/2021

Supersedes: 03/05/2019

Version: 2.0

SECTION 1: Product identifier

1.1. Product identifier

Product form : Mixture
Trade name : TIGERSEAL PU ADHESIVE & SEALANT - BLACK
Product code : TIG/NB

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
NSW 2750 Penrith - Australia
T 02 4731 2655 - F 02 4731 2611
info@u-pol.co.au - www.u-pol.com

Supplier

U-POL New Zealand Limited
c/o Lindsay & Associates
Unit H, 12 Amera Place, East Tamaki
2013 Manukau City - New Zealand
T + 612 4731 2655 - F + 612 4731 2611
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: Hazards identification

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Skin corrosion/irritation, Category 3 H316
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 (< 10 %); 4,4'-methylenediphenyl diisocyanate, oligomers (< 10 %); 4-isocyanatosulphonyltoluene; tosyl isocyanate (< 10 %)
Hazard statements (GHS AU) : H316 - Causes mild skin irritation
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Precautionary statements (GHS AU) : P261 - Avoid breathing fume, vapours.
P285 - In case of inadequate ventilation wear respiratory protection.
P304+P341 - IF INHALED: if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER/doctor/...
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

TIGERSEAL PU ADHESIVE & SEALANT - BLACK

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)
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate ()	101-68-8	< 10	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
4,4'-methylenediphenyl diisocyanate, oligomers ()	25686-28-6	< 10	Acute Tox. 4 (Inhalation:vapour), 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
4-isocyanatosulphonyltoluene; tosyl isocyanate ()	4083-64-1	< 10	Acute Tox. 5 (Oral), H303 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Resp. Sens. 1, H334 STOT SE 3, H335
Other substances (not contributing to the classification of this product)		≥ 99.2	

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. If experiencing respiratory symptoms: Call a poison center or a doctor.
- First-aid measures after skin contact : Wash skin with plenty of water. Take off 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 allergy or asthma symptoms or breathing difficulties if inhaled.
- Symptoms/effects after skin contact : 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 : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. 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 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 material for containment and cleaning up

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

TIGERSEAL PU ADHESIVE & SEALANT - BLACK

Safety Data Sheet

according to the Model Work Health and Safety Regulations

Methods for cleaning up : Mechanically recover the product.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing vapours, 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

Storage conditions : Store in a well-ventilated place. Keep cool.

Storage temperature : < 25 °C

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	OES TWA [1]	0.02 mg/m ³
Australia	OES STEL	0.07 mg/m ³
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 (MDI, Methylene bisphenyl isocyanate) (Isocyanates)
New Zealand	WES-TWA (OEL TWA) [1]	0.02 mg/m ³
New Zealand	WES-STEL (OEL STEL)	0.07 mg/m ³
New Zealand	BEI	10 µg/g creatinine Parameter: 4,4-Diaminodiphenyl (following hydrolysis) - Medium: Urine - Sampling time: End of shift or end of exposure
New Zealand	Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th 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 inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s)

TIGERSEAL PU ADHESIVE & SEALANT - BLACK

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	: Solid
Appearance	: Paste.
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	: 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	: Density : 1.23 g/cm ³ Relative density : Not applicable
Solubility	: insoluble in water. Reacts with water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: Not applicable
Explosive properties	: No data available
Explosive limits	: Not applicable
Minimum ignition energy	: No data available
VOC content	: 97.6 g/l
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 (Dust/Mist)	1.5 mg/l/4h
4,4'-methylenediphenyl diisocyanate, oligomers (25686-28-6)	
LD50 oral rat	> 5000 mg/kg (OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure), rat, female)
LD50 dermal rabbit	> 9400 mg/kg (OECD Guideline 402 (Acute Dermal Toxicity), rat, male/female)
LC50 Inhalation - Rat (Dust/Mist)	0.368 mg/l/4h (OECD Guideline 403 (Acute Inhalation Toxicity), rat, male, 4h, Inhalation (aerosol))

TIGERSEAL PU ADHESIVE & SEALANT - BLACK

Safety Data Sheet

according to the Model Work Health and Safety Regulations

4-isocyanatosulphonyltoluene; tosyl isocyanate (4083-64-1)

LD50 oral rat	2330 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 2080 - 2600
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))

Skin corrosion/irritation	: Causes mild skin irritation.
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.

TIGERSEAL PU ADHESIVE & SEALANT - BLACK

Viscosity, kinematic	Not applicable
----------------------	----------------

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 (chronic)	: Not classified

4,4'-methylenediphenyl diisocyanate; 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 - Crustacea [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)
Partition coefficient n-octanol/water (Log Pow)	4.51 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 22 °C)

4-isocyanatosulphonyltoluene; tosyl isocyanate (4083-64-1)

LC50 - Fish [1]	> 45 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
ErC50 algae	30 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	0.6 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method)

12.2. Persistence and degradability

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate (101-68-8)

Persistence and degradability	Not readily biodegradable in water.
-------------------------------	-------------------------------------

4-isocyanatosulphonyltoluene; tosyl isocyanate (4083-64-1)

Persistence and degradability	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
Partition coefficient n-octanol/water (Log Pow)	See section 12.1 on ecotoxicology
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

4-isocyanatosulphonyltoluene; tosyl isocyanate (4083-64-1)

Partition coefficient n-octanol/water (Log Pow)	See section 12.1 on ecotoxicology
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

TIGERSEAL PU ADHESIVE & SEALANT - BLACK

Safety Data Sheet

according to the Model Work Health and Safety Regulations

12.4. Mobility in soil

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate (101-68-8)	
Surface tension	Data waiving
Partition coefficient n-octanol/water (Log Pow)	See section 12.1 on ecotoxicology
Ecology - soil	No (test)data on mobility of the substance available.
4-isocyanatosulphonyltoluene; tosyl isocyanate (4083-64-1)	
Partition coefficient n-octanol/water (Log Pow)	See section 12.1 on ecotoxicology
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

TIGERSEAL PU ADHESIVE & SEALANT - BLACK	
Fluorinated greenhouse gases	False
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
4-isocyanatosulphonyltoluene; tosyl isocyanate (4083-64-1)	
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

ADG	IMDG	IATA
14.2. UN proper shipping name		
Not applicable	Not applicable	Not applicable
14.4. Packing group		
Not applicable	Not applicable	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

Hazchem Code	: 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

TIGERSEAL PU ADHESIVE & SEALANT - BLACK

Safety Data Sheet

according to the Model Work Health and Safety Regulations

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate (101-68-8)

Hazardous Substances and New Organisms Act

HSNO Approval Number : HSR003218

Xylene (1330-20-7)

Hazardous Substances and New Organisms Act

HSNO Approval Number : HSR000983

Ethylbenzene (100-41-4)

Hazardous Substances and New Organisms Act

HSNO Approval Number : HSR001151

15.2. International agreements

No additional information available

SECTION 16: Other information

Revision date : 26/03/2021

Classification:

Skin Irrit. 3	H316
Resp. Sens. 1	H334

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
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 Irrit. 3	Skin corrosion/irritation, Category 3
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
H303	May be harmful if swallowed
H315	Causes skin irritation.
H316	Causes mild 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.

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.