

Safety Data Sheet according to the Model Work Health and Safety Regulations Date of issue:14/12/2016 Revision date:03/05/2019

DRIVING SURFACE PERFECTION	Date of issue:14/12/2016	Revision date:03/05/2019	Supersedes: 21/07/2017	Version: 1.1
SECTION 1: Identification :	Product identifier and	chemical identity		
1.1. Product identifier				
Product form	: Mixture			
Trade name	: U-POL TIGER	SEAL - BLACK		
Product code	: TIG/NB			
1.2. Other means of identifica	ition			
No additional information available				
1.3. Recommended use of the	e chemical and restrictions of	on use		
Recommended use	: Adhesives, sea	alants		
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.at	2	Supplier U-POL NEW ZEALAND c/o Lindsay & Associate Unit H, 12 Amera Place, Manukau City 2013 - Ne T + 612 4731 2655 - F + technicalsupport@u-pol.	s , East Tamaki ew Zealand - 612 4731 2611	
1.5. Emergency phone number	er			
Emergency number	: Australia (CHE 764 766	:MTREC): + (61) - 290372994 ; N	New Zealand (National Poisons (Centre): 0800
SECTION 2: Hazards identif	ication			
2.1. Classification of the haza	rdous chemical			
Classification according to the mo	del Work Health and Safety	Regulations (WHS Regulations	5)	
Respiratory sensitisation, Category 1	H334			
2.2. Label elements				
Hazard pictograms (GHS AU)		•		
Signal word (GHS AU)	: Danger			
Contains		diphenyl diisocyanate; diphenylm enyl diisocyanate, oligomers (< 5		b); 4,4'-
Hazard statements (GHS AU)	: H334 - May ca	use allergy or asthma symptoms	or breathing difficulties if inhale	d.
Precautionary statements (GHS AU)	P264 - Wash ł P280 - Wear e P302+P352 - I	preathing fume, vapours. hands thoroughly after handling. ye protection, protective clothing. F ON SKIN: Wash with plenty of POISON CENTER/doctor if you fe	water	
2.3. Other hazards				

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	3
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 med	lical attention and special treatment needed
Other medical advice or treatment	: Treat symptomatically.
SECTION 5: Eirofighting modeuro	
SECTION 5: Firefighting measure	5
5.1. Extinguishing media	Water seray Dry powder. Feam
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 an	d 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 m	easures
6.1. Personal precautions, protective	equipment and emergency procedures
0.4.4	
6.1.1. For non-emergency personnel	
6.1.1. For non-emergency personnel Protective equipment	: Safety glasses. Protective clothing. Gloves.
	Safety glasses. Protective clothing. Gloves.Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray.
Protective equipment Emergency procedures	
Protective equipment Emergency procedures 6.1.2. For emergency responders	: Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray.
Protective equipment Emergency procedures	
Protective equipment Emergency procedures 6.1.2. For emergency responders	 : Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. : Do not attempt to take action without suitable protective equipment. For further information
Protective equipment Emergency procedures 6.1.2. For emergency responders Protective equipment	 : Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. : Do not attempt to take action without suitable protective equipment. For further information
Protective equipment Emergency procedures 6.1.2. For emergency responders Protective equipment 6.2. Environmental precautions Avoid release to the environment.	 Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Protective equipment Emergency procedures 6.1.2. For emergency responders Protective equipment 6.2. Environmental precautions Avoid release to the environment.	 Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Protective equipment Emergency procedures 6.1.2. For emergency responders Protective equipment 6.2. Environmental precautions Avoid release to the environment. 6.3. Methods and material for contain	 Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Protective equipment Emergency procedures 6.1.2. For emergency responders Protective equipment 6.2. Environmental precautions Avoid release to the environment. 6.3. Methods and material for contain For containment	 Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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Protective equipment Emergency procedures 6.1.2. For emergency responders Protective equipment 6.2. Environmental precautions Avoid release to the environment. 6.3. Methods and material for contain For containment Methods for cleaning up SECTION 7: Handling and storage 7.1. Precautions for safe handling	 Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". nment and cleaning up Collect spillage. Contain released product, pump into suitable containers. Mechanically recover the product. including how the chemical may be safely used Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid
 Protective equipment Emergency procedures 6.1.2. For emergency responders Protective equipment 6.2. Environmental precautions Avoid release to the environment. 6.3. Methods and material for contain For containment Methods for cleaning up SECTION 7: Handling and storage 7.1. Precautions for safe handling Precautions for safe handling 	 Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". nment and cleaning up Collect spillage. Contain released product, pump into suitable containers. Mechanically recover the product. e, including how the chemical may be safely used Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
 Protective equipment Emergency procedures 6.1.2. For emergency responders Protective equipment 6.2. Environmental precautions Avoid release to the environment. 6.3. Methods and material for contain For containment Methods for cleaning up SECTION 7: Handling and storage 7.1. Precautions for safe handling Precautions for safe handling Hygiene measures 	 Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". nment and cleaning up Collect spillage. Contain released product, pump into suitable containers. Mechanically recover the product. e, including how the chemical may be safely used Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Protective equipment Emergency procedures 6.1.2. For emergency responders Protective equipment 6.2. Environmental precautions Avoid release to the environment. 6.3. Methods and material for contain For containment Methods for cleaning up SECTION 7: Handling and storage 7.1. Precautions for safe handling Precautions for safe handling Hygiene measures 7.2. Conditions for safe storage, incl	 Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". nment and cleaning up Collect spillage. Contain released product, pump into suitable containers. Mechanically recover the product. e, including how the chemical may be safely used Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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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)

<i>, , ,</i>		<i>, , ,</i>
Australia	Local name	Methylene bisphenyl isocyanate (MDI) (Diphenylmethane diisocyanate)
Australia	TWA (mg/m ³)	0.02 mg/m ³
Australia	STEL (mg/m ³)	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 (Isocyanates)
New Zealand	TWA (mg/m ³)	0.02 mg/m ³
New Zealand	STEL (mg/m ³)	0.07 mg/m ³
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 additio	onal information available	
8.3.	Appropriate engineering controls	
Appropria	te 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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Appearance	: Paste.
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
рН	: 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 : ≈ 1.22 g/cm³ Relative density : Not applicable
Solubility	: insoluble in water. Reacts with water.
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 reactivi	ty
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		
: Not classified		
: Not classified		
: Not classified		

LD50 oral rat	ciphenylmethane-4,4'-diisocyanate (101-68-8) > 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 401, Rat, Pennale, Read-across, Oral) > 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
spiration 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 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 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	
Log Koc	See section 12.1 on ecotoxicology	
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).	

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	
U-POL TIGER SEAL - BLACK		
Fluorinated greenhouse gases	False	

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1 1-mothylonodinhonyl diisaayanata, disha	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate (101-68-8)		
4,4 - methylenediphenyl dilsocyanate; diphel Fluorinated greenhouse gases	False		
4,4'-methylenediphenyl diisocyanate, oligon Fluorinated greenhouse gases	False		
diisononyl phthalate (28553-12-0)			
Fluorinated greenhouse gases	False		
SECTION 13: Disposal consideration			
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		
ΙΑΤΑ			
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	e : Not applicable		
SECTION 15: Regulatory information	SECTION 15: Regulatory information		
	gulations/legislation specific for the substance or mixture		
No additional information available			
Hazardous Substances and New Organisms			
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

15.2. International agreements

No additional information available

SECTION 16: Any other relevant information

Revision date	: 03/05/2019
Classification:	
Resp. Sens. 1	H334
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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