

Safety Data Sheet according to WHS Regulations

Printing date 23.10.2017

Vers.-Nr: 55



Revision: 23.10.2017

Hazardous according to criteria of Australian Safety and Compensation Council.

1 Identification

- **Product identifier**
- **Trade name: Transurethane Finish PUF 3060 pack B**
- **Article number:** 346-2b
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance/preparation:**
Hardening agent/ Curing agent
Isocyanate resin
Paint
- **Details of the supplier of the safety data sheet**
- **Manufacturer/supplier:**
Transocean Coatings
Wagon Paints Australia Pty Ltd
ABN: 76 412 791 772
Street address: 5 Stephenson Road, Bayswater North
VIC, 3153 Australia
Phone: +613 9729-1344
Fax: +613 9720 2719
- **Emergency telephone number:**
Manufacturer/Supplier
(03) 9729 1344 from 8.00 am to 4.30 pm.

2 Hazard(s) Identification

- **Classification of the substance or mixture**
Flam. Liq. 3 H226 Flammable liquid and vapour.
Acute Tox. 4 H332 Harmful if inhaled.
Skin Irrit. 2 H315 Causes skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335 May cause respiratory irritation.
- **Label elements**
- **GHS label elements**
The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**

GHS02 GHS07
- **Signal word** Warning
- **Hazard-determining components of labelling:**
hexamethylene-1,6-diisocyanate polymer
xylene, mixture of isomers
ethylbenzene
hexamethylene-di-isocyanate

(Contd. on page 2)

Safety Data Sheet according to WHS Regulations

Printing date 23.10.2017

Vers.-Nr: 55

Revision: 23.10.2017

Trade name: Transurethane Finish PUF 3060 pack B

(Contd. of page 1)

- **Hazard statements**
Flammable liquid and vapour.
Harmful if inhaled.
Causes skin irritation.
May cause an allergic skin reaction.
May cause respiratory irritation.
- **Precautionary statements**
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Use explosion-proof electrical/ventilating/lighting equipment.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
Specific treatment (see on this label).
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition and Information on Ingredients

- **Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

| | | |
|------------|--|---------|
| 28182-81-2 | hexamethylene-1,6-diisocyanate polymer ⚠ Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335 | 50-100% |
| 108-65-6 | 2-methoxy-1-methylethyl acetate ⚠ Flam. Liq. 3, H226 | 10-25% |
| 1330-20-7 | xylene, mixture of isomers ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; STOT SE 3, H335 | 2.5-10% |
| 100-41-4 | ethylbenzene ⚠ Flam. Liq. 2, H225; ⚠ STOT RE 2, H373; Asp. Tox. 1, H304; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319 | ≤ 2.5% |
| 822-06-0 | hexamethylene-di-isocyanate ⚠ Acute Tox. 3, H311; Acute Tox. 3, H331; ⚠ Resp. Sens. 1, H334; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; STOT SE 3, H335 | ≤ 2.5% |

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

4 First Aid Measures

- **Description of first aid measures**
- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.

(Contd. on page 3)

Safety Data Sheet according to WHS Regulations

Printing date 23.10.2017

Vers.-Nr: 55

Revision: 23.10.2017

Trade name: Transurethane Finish PUF 3060 pack B

(Contd. of page 2)

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire Fighting Measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture**
No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and Storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.

(Contd. on page 4)

Safety Data Sheet according to WHS Regulations

Printing date 23.10.2017

Vers.-Nr: 55

Revision: 23.10.2017

Trade name: Transurethane Finish PUF 3060 pack B

(Contd. of page 3)

- **Specific end use(s)** No further relevant information available.

8 Exposure controls and personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**

• **Ingredients with limit values that require monitoring at the workplace:**

108-65-6 2-methoxy-1-methylethyl acetate

| | |
|-----|--|
| WES | Short-term value: 548 mg/m ³ , 100 ppm Long-term value: 274 mg/m ³ , 50 ppm Sk |
|-----|--|

1330-20-7 xylene, mixture of isomers

| | |
|-----|--|
| WES | Short-term value: 655 mg/m ³ , 150 ppm Long-term value: 350 mg/m ³ , 80 ppm |
|-----|--|

100-41-4 ethylbenzene

| | |
|-----|---|
| WES | Short-term value: 543 mg/m ³ , 125 ppm Long-term value: 434 mg/m ³ , 100 ppm |
|-----|---|

822-06-0 hexamethylene-di-isocyanate

| | |
|-----|---|
| WES | Short-term value: 0.07 mg/m ³ Long-term value: 0.02 mg/m ³ Sen, as -NCO |
|-----|---|

• **DNELs**

28182-81-2 hexamethylene-1,6-diisocyanate polymer

| | | |
|------------|----------------|---------------------------------|
| Inhalative | long term DNEL | 0.5 mg/m ³ (Workers) |
| | Acute DNEL | 1 mg/m ³ (Workers) |

• **PNECs**

28182-81-2 hexamethylene-1,6-diisocyanate polymer

| | |
|---------------|----------------------------------|
| PNEC STP | 100 mg/l (water treatment plant) |
| PNEC aqua | 199 ug/l (freshwater) |
| | 19.9 ug/l (marine water) |
| PNEC sediment | 44551 mg/kg (freshwater) |
| | 4455 mg/kg (marine water) |
| PNEC soil | 8884 mg/kg (Soil) |

- **Additional information:** The lists valid during the making were used as basis.

• **Exposure controls**

• **Personal protective equipment:**

• **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.

• **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

(Contd. on page 5)

Safety Data Sheet according to WHS Regulations

Printing date 23.10.2017

Vers.-Nr: 55

Revision: 23.10.2017

Trade name: Transurethane Finish PUF 3060 pack B

(Contd. of page 4)

• **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

• **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

• **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• **Eye protection:**



Tightly sealed goggles

9 Physical and Chemical Properties

• **Information on basic physical and chemical properties**

• **General Information**

• **Appearance:**

Form: Fluid
Colour: According to product specification

• **Odour:** Characteristic

• **Odour threshold:** Not determined.

• **pH-value:** Not determined.

• **Change in condition**

Melting point/freezing point: Undetermined.
Initial boiling point and boiling range: 145 °C

• **Flash point:** 38 °C

• **Flammability (solid, gas):** Not applicable.

• **Ignition temperature:** 315 °C

• **Decomposition temperature:** Not determined.

• **Auto-ignition temperature:** Product is not selfigniting.

• **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

(Contd. on page 6)

Safety Data Sheet according to WHS Regulations

Printing date 23.10.2017

Vers.-Nr: 55

Revision: 23.10.2017

Trade name: Transurethane Finish PUF 3060 pack B

(Contd. of page 5)

| | |
|--|--|
| · Explosion limits: | |
| Lower: | 1.1 Vol % |
| Upper: | 10.8 Vol % |
| · Vapour pressure at 20 °C: | 6.7 hPa |
| · Density at 20 °C: | 1.07 g/cm ³ |
| · Relative density | Not determined. |
| · Vapour density | Not determined. |
| · Evaporation rate | Not determined. |
| · Solubility in / Miscibility with water: | Not miscible or difficult to mix. |
| · Partition coefficient: n-octanol/water: | Not determined. |
| · Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| · Solvent content: | |
| VOC (EC) | 267.5 g/l |
| · Other information | No further relevant information available. |

10 Stability and Reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological Information

- **Information on toxicological effects**
- **Acute toxicity**

- **LD/LC50 values relevant for classification:**

28182-81-2 hexamethylene-1,6-diisocyanate polymer

| | | |
|------------|-------------|-------------------|
| Oral | LD50 | >5000 mg/kg (rat) |
| | LC50/ 96 hr | >100 mg/l (fish) |
| Dermal | LD50 | >2000 mg/kg (rat) |
| Inhalative | LC50/4 h | 0.390 mg/l (rat) |

822-06-0 hexamethylene-di-isocyanate

| | | |
|--------|------|-----------------|
| Oral | LD50 | 738 mg/kg (rat) |
| Dermal | LD50 | 593 mg/kg (rat) |

(Contd. on page 7)

Safety Data Sheet according to WHS Regulations

Printing date 23.10.2017

Vers.-Nr: 55

Revision: 23.10.2017

Trade name: Transurethane Finish PUF 3060 pack B

(Contd. of page 6)

- **Primary irritant effect:**
- **Skin corrosion/irritation** No irritant effect.
- **Serious eye damage/irritation** No irritating effect.
- **Respiratory or skin sensitisation** Sensitisation possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful
Irritant

12 Ecological Information

- **Toxicity**

- **Aquatic toxicity:**

28182-81-2 hexamethylene-1,6-diisocyanate polymer

| | |
|------|------------------------|
| EC50 | >10000 mg/l (Bacteria) |
|------|------------------------|

| | |
|---------------|---------------------|
| EC 50 (48 hr) | >100 mg/l (daphnia) |
|---------------|---------------------|

- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|----------------------------------|------------------------------------|
| · UN-Number | |
| · ADG, IMDG, IATA | UN1263 |
| · UN proper shipping name | |
| · ADG | 1263 PAINT, special provision 640E |

(Contd. on page 8)

Safety Data Sheet according to WHS Regulations


Printing date 23.10.2017

Vers.-Nr: 55

Revision: 23.10.2017

Trade name: Transurethane Finish PUF 3060 pack B

(Contd. of page 7)

| | |
|---|--|
| · IMDG, IATA | PAINT |
| · Transport hazard class(es) | |
| · ADG, IMDG, IATA | |
|  | |
| · Class | 3 Flammable liquids. |
| · Label | 3 |
| · Packing group | |
| · ADG, IMDG, IATA | III |
| · Environmental hazards: | |
| · Marine pollutant: | No |
| · Special precautions for user | Warning: Flammable liquids. |
| · Danger code (Kemler): | 30 |
| · EMS Number: | F-E, S-E |
| · Stowage Category | A |
| · Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| · Transport/Additional information: | |
| · ADG | |
| · Limited quantities (LQ) | 5L |
| · Excepted quantities (EQ) | Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml |
| · Transport category | 3 |
| · Tunnel restriction code | D/E |
| · IMDG | |
| · Limited quantities (LQ) | 5L |
| · Excepted quantities (EQ) | Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml |
| · UN "Model Regulation": | UN 1263 PAINT, SPECIAL PROVISION 640E, 3, III |

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Australian Inventory of Chemical Substances**

All ingredients are listed.

· **Standard for the Uniform Scheduling of Medicines and Poisons**

1330-20-7 xylene, mixture of isomers

S6

(Contd. on page 9)

Safety Data Sheet according to WHS Regulations

Printing date 23.10.2017

Vers.-Nr: 55

Revision: 23.10.2017

Trade name: Transurethane Finish PUF 3060 pack B

(Contd. of page 8)

- **GHS label elements**

The product is classified and labelled according to the Globally Harmonised System (GHS).

- **Hazard pictograms**



GHS02 GHS07

- **Signal word** Warning

- **Hazard-determining components of labelling:**

hexamethylene-1,6-diisocyanate polymer

xylene, mixture of isomers

ethylbenzene

hexamethylene-di-isocyanate

- **Hazard statements**

Flammable liquid and vapour.

Harmful if inhaled.

Causes skin irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

- **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Use explosion-proof electrical/ventilating/lighting equipment.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Specific treatment (see on this label).

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Directive 2012/18/EU**

- **Named dangerous substances - ANNEX I** None of the ingredients is listed.

- **Seveso category** P5c FLAMMABLE LIQUIDS

- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t

- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 t

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

(Contd. on page 10)

Safety Data Sheet according to WHS Regulations

Printing date 23.10.2017

Vers.-Nr: 55

Revision: 23.10.2017

Trade name: Transurethane Finish PUF 3060 pack B

(Contd. of page 9)

LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1

• *** Data compared to the previous version altered.**

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