

Safety data sheet according to WHS Regulations

Printing date 21.03.2016

Vers.-Nr: 52


Revision: 21.03.2016

Hazardous according to criteria of Australian Safety and Compensation Council

1 Identification

- **Product identifier**
- **Trade name: Transpoxy Barrier 2.16 Hardener**
- **Article number:** 216b-2
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance/preparation:**
Epoxy curing agent
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 Identification

- **Classification of the substance or mixture**
Flam. Liq. 3 H226 Flammable liquid and vapour.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Dam. 1 H318 Causes serious eye damage.
Skin Sens. 1 H317 May cause an allergic skin reaction.
- **Label elements**
- **GHS label elements**
The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**

GHS02 GHS05 GHS07
- **Signal word** Danger
- **Hazard-determining components of labelling:**
reaction product based on fatty acids and polyethyleneamine
butan-1-ol
xylene, mixture of isomers
3,6-diazaoctanethylenediamin
- **Hazard statements**
Flammable liquid and vapour.

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Causes skin irritation.

Causes serious eye damage.

May cause an allergic skin reaction.

• **Precautionary statements**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor.

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:**

68410-23-1	reaction product based on fatty acids and polyethyleneamine ☠ Eye Dam. 1, H318	50-100%
71-36-3	butan-1-ol ☠ Flam. Liq. 3, H226; ☠ Eye Dam. 1, H318; ☠ Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335-H336	10-25%
78-83-1	iso-butanol ☠ Flam. Liq. 3, H226; ☠ Eye Dam. 1, H318; ☠ Skin Irrit. 2, H315; STOT SE 3, H335-H336	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	2,5-10%
112-24-3	3,6-diazaoctanethylenediamin ☠ Skin Corr. 1B, H314; ☠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	≤ 2,5%

• **Additional information:** For the wording of the listed risk 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.

• **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

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- **After eye contact:**
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Call for a doctor immediately.
- **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:** No special measures required.

* 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.

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- **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:**

71-36-3 butan-1-ol

NES	Peak limitation: 152 mg/m ³ , 50 ppm
	Sk

78-83-1 iso-butanol

NES	Long-term value: 152 mg/m ³ , 50 ppm
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1330-20-7 xylene, mixture of isomers

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

· **DNELs**

71-36-3 butan-1-ol

Oral	long term DNEL	3125 mg/kg/d (General Population)
Inhalative	long term DNEL	55 mg/m ³ (General Population)
		310 mg/m ³ (Workers)

· **PNECs**

71-36-3 butan-1-ol

PNEC STP	2476 mg/l (water treatment plant)
	2.25 mg/l (intermittent release)
PNEC aqua	8.2 ug/l (marine water)
PNEC sediment	0.178 mg/kg (freshwater)
	0.0178 mg/kg (marine water)
PNEC soil	0.015 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.
- Avoid contact with the skin.
- Avoid contact with the eyes and skin.

· **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.

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· **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**

Boiling point/Boiling range:	108 °C
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· **Flash point:** 24 °C

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 340 °C

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

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· Explosion limits:	
Lower:	1.5 Vol %
Upper:	12.0 Vol %
· Vapour pressure at 20 °C: 12 hPa	
· Density at 20 °C: 0.9294 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)	349.5 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:**

71-36-3 butan-1-ol

Oral	LD50	2292 mg/kg (rat)
	LC50/ 96 hr	1376 mg/l (fish)
Dermal	LD50	3400 mg/kg (rabbit)
Inhalative	LC50/4 h	17.76 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Irritant to skin and mucous membranes.
- **Serious eye damage/irritation** Strong irritant with the danger of severe eye injury.
- **Respiratory or skin sensitisation** Sensitisation possible through skin contact.

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· **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:**

71-36-3 butan-1-ol

EC 50 (48 hr) 1328 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

· **IMDG**

PAINT

· **IATA**

Paint

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· **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

· **GHS label elements**

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

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· **Hazard pictograms**



GHS02 GHS05 GHS07

· **Signal word** Danger

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

reaction product based on fatty acids and polyethyleneamine
butan-1-ol
xylene, mixture of isomers
3,6-diazaoctanethylenediamin

· **Hazard statements**

Flammable liquid and vapour.
Causes skin irritation.
Causes serious eye damage.
May cause an allergic skin reaction.

· **Precautionary statements**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER/doctor.
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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

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PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 3: Flammable liquids, Hazard Category 3
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

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

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