

Safety Data Sheet according to WHS Regulations

Printing date 01.04.2021

Vers.-Nr: 52


Revision: 01.04.2021

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
- **Registration number** APVMA approval Number: 84506
- **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(s) 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 C18 unsat., dimers with amines and polyethyleneamine
3,6-diazaoctanethylenediamin
butan-1-ol
iso-butanol

(Contd. on page 2)

Safety Data Sheet according to WHS Regulations

Printing date 01.04.2021

Vers.-Nr: 52

Revision: 01.04.2021

Trade name: Transpoxy Barrier 2.16 Hardener

(Contd. of page 1)

· **Hazard statements**

- H226 Flammable liquid and vapour.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H317 May cause an allergic skin reaction.

· **Precautionary statements**

- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P241 Use explosion-proof electrical/ventilating/lighting equipment.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a POISON CENTER/doctor.
- P321 Specific treatment (see on this label).
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P501 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 C18 unsat., dimers with amines and polyethyleneamine ☠ Eye Dam. 1, H318; ☠ Skin Irrit. 2, H315	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-<20%
78-83-1	iso-butanol ☠ Flam. Liq. 3, H226; ☠ Eye Dam. 1, H318; ☠ Skin Irrit. 2, H315; STOT SE 3, H335-H336	≥10-<20%
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%
112-24-3	3,6-diazaoctanethylenediamin ☠ Skin Corr. 1B, H314; ☠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	≥1-<2.5%

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

AU

(Contd. on page 3)

Safety Data Sheet according to WHS Regulations

Printing date 01.04.2021

Vers.-Nr: 52

Revision: 01.04.2021

Trade name: Transpoxy Barrier 2.16 Hardener

(Contd. of page 2)

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.
- **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.
- **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.

(Contd. on page 4)

Safety Data Sheet according to WHS Regulations

Printing date 01.04.2021

Vers.-Nr: 52

Revision: 01.04.2021

Trade name: Transpoxy Barrier 2.16 Hardener

(Contd. of page 3)

- **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.
- **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

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

78-83-1 iso-butanol

WES	Long-term value: 152 mg/m ³ , 50 ppm
-----	---

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

· **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)

78-83-1 iso-butanol

Oral	long term DNEL	25 mg/kg/d (General Population)
Inhalative	long term DNEL	55 mg/m ³ (General Population) 310 mg/m ³ (Workers)

1330-20-7 xylene, mixture of isomers

Dermal	long term DNEL	108 mg/kg/d (General Population) 180 mg/kg/d (Workers)
Inhalative	long term DNEL	14.8 mg/m ³ (General Population) 77 mg/m ³ (Workers)

112-24-3 3,6-diazaoctanethylenediamin

Dermal	long term DNEL	0.57 mg/kg/d (Workers)
Inhalative	long term DNEL	1 mg/m ³ (Workers)
	Acute DNEL	5380 mg/m ³ (Workers)

· **PNECs**

71-36-3 butan-1-ol

PNEC STP	2476 mg/l (water treatment plant)
----------	-----------------------------------

(Contd. on page 5)

Safety Data Sheet according to WHS Regulations

Printing date 01.04.2021

Vers.-Nr: 52

Revision: 01.04.2021

Trade name: Transpoxy Barrier 2.16 Hardener

(Contd. of page 4)

PNEC aqua	2.25 mg/l (intermittent release)
PNEC sediment	8.2 ug/l (marine water)
	0.178 mg/kg (freshwater)
	0.0178 mg/kg (marine water)
PNEC soil	0.015 mg/kg (Soil)
78-83-1 iso-butanol	
PNEC STP	10 mg/l (water treatment plant)
PNEC aqua	400 ug/l (freshwater)
	40 ug/l (marine water)
PNEC sediment	1.52 mg/kg (freshwater)
	0.152 mg/kg (marine water)
PNEC soil	0.0699 mg/kg (Soil)
1330-20-7 xylene, mixture of isomers	
PNEC STP	6.58 mg/l (water treatment plant)
PNEC aqua	327 ug/l (freshwater)
	327 ug/l (marine water)
PNEC sediment	12.46 mg/kg (freshwater)
	12.46 mg/kg (marine water)
PNEC soil	2.31 mg/kg (Soil)
112-24-3 3,6-diazaoctanethylenediamin	
PNEC STP	4.25 mg/l (water treatment plant)
PNEC aqua	190 ug/l (freshwater)
	38 ug/l (marine water)
PNEC sediment	95.9 mg/kg (freshwater)
	19.2 mg/kg (marine water)
PNEC soil	19.1 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.

· **Protection of hands:**



Protective gloves

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

(Contd. on page 6)

Safety Data Sheet according to WHS Regulations

Printing date 01.04.2021

Vers.-Nr: 52

Revision: 01.04.2021

Trade name: Transpoxy Barrier 2.16 Hardener

(Contd. of page 5)

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: 108 °C

· **Flash point:** 24 °C

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

· **Ignition temperature:** 340 °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.

· **Explosion limits:**

Lower: 1.5 Vol %

Upper: 12 Vol %

· **Vapour pressure at 20 °C:** 12 hPa

· **Density at 20 °C:** 0.9294 g/cm³

· **Relative density** Not determined.

· **Vapour density** Not determined.

(Contd. on page 7)

Safety Data Sheet according to WHS Regulations

Printing date 01.04.2021

Vers.-Nr: 52

Revision: 01.04.2021

Trade name: Transpoxy Barrier 2.16 Hardener

(Contd. of page 6)

· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity: Dynamic: Kinematic:	Not determined. 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)

78-83-1 iso-butanol

Oral	LD50	3350 mg/kg (rat)
	LC50/ 96 hr	1430 mg/l (fish)
Dermal	LD50	>2000 mg/kg (rabbit)
Inhalative	LC50/4 h	18.18 mg/l (rat)

1330-20-7 xylene, mixture of isomers

Oral	LD50	>2000 mg/kg (rat)
	LC50/ 96 hr (static)	2.6 mg/l (Rainbow trout (<i>Oncorhynchus mykiss</i>)) (OESO 203 or equivalent)
Dermal	LD50	>2000 mg/kg (rabbit)
Inhalative	LC50/4 h	>20 mg/l (rat)

(Contd. on page 8)

Safety Data Sheet according to WHS Regulations

Printing date 01.04.2021

Vers.-Nr: 52

Revision: 01.04.2021

Trade name: Transpoxy Barrier 2.16 Hardener

(Contd. of page 7)

112-24-3 3,6-diazaoctanethylenediamin

Oral	LD50	1716 mg/kg (rat)
	LC50/ 96 hr	330 mg/l (fish)
Dermal	LD50	1465 mg/kg (rabbit)

- **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.
- **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)
78-83-1 iso-butanol		
EC 50 (48 hr)	1100 mg/l	(daphnia)
EC 50 (72 hr)	1799 mg/l	(Algae)
1330-20-7 xylene, mixture of isomers		
EC 50 (48 hr)	1-10 mg/l	(daphnia)
EC 50 (72 hr)	1-10 mg/l	(Algae)
112-24-3 3,6-diazaoctanethylenediamin		
EC 50 (48 hr)	31.1 mg/l	(daphnia)
EC 50 (72 hr)	20 mg/l	(Algae)

- **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.

AU

(Contd. on page 9)

Safety Data Sheet according to WHS Regulations

Printing date 01.04.2021

Vers.-Nr: 52

Revision: 01.04.2021




Trade name: Transpoxy Barrier 2.16 Hardener

(Contd. of page 8)

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 · IMDG, IATA	1263 PAINT, ENVIRONMENTALLY HAZARDOUS PAINT
· Transport hazard class(es) · ADG	
 	
· Class · Label	3 Flammable liquids. 3
· IMDG, IATA	
	
· Class · Label	3 Flammable liquids. 3
· Packing group · ADG, IMDG, IATA	III
· Environmental hazards: · Marine pollutant: · Special marking (ADG):	No Symbol (fish and tree)
· Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Stowage Category	Warning: Flammable liquids. 30 F-E, <u>S-E</u> A
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.

(Contd. on page 10)

Safety Data Sheet according to WHS Regulations

Printing date 01.04.2021

Vers.-Nr: 52

Revision: 01.04.2021

Trade name: Transpoxy Barrier 2.16 Hardener

(Contd. of page 9)

· **Transport/Additional information:**

· **ADG**

- **Limited quantities (LQ)**
- **Excepted quantities (EQ)**

5L
Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

- **Transport category**
- **Tunnel restriction code**

3
D/E

· **IMDG**

- **Limited quantities (LQ)**
- **Excepted quantities (EQ)**

5L
Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

· **UN "Model Regulation":**

UN 1263 PAINT, 3, III, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

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

· **Australian Inventory of Industrial Chemicals**

All ingredients are listed.

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

71-36-3	butan-1-ol	S5, S6
1330-20-7	xylene, mixture of isomers	S6

· **Australia: Priority Existing Chemicals**

None of the ingredients is listed.

· **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 C18 unsat., dimers with amines and polyethyleneamine
3,6-diazaoctanethylenediamin
butan-1-ol
iso-butanol

· **Hazard statements**

H226 Flammable liquid and vapour.

(Contd. on page 11)

Safety Data Sheet according to WHS Regulations

Printing date 01.04.2021

Vers.-Nr: 52

Revision: 01.04.2021

Trade name: Transpoxy Barrier 2.16 Hardener

(Contd. of page 10)

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 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**

E2 Hazardous to the Aquatic Environment

P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t**Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 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.

Contact:**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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity - oral – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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