

## Safety Data Sheet according to P.U.(A) 310/2013

Printing date 24.10.2019

Vers.-Nr: 51



Revision: 24.10.2019

### 1 Identification of the hazardous chemical and of the supplier

- **Product identifier**
- **Trade name: Transpoxy Tankguard 458 pack A**
- **Article number:** 458a
- **Recommended use of the chemical and restrictions on use**  
No further relevant information available.
- **Application of the substance/preparation:**  
Epoxy coating  
Paint
- **Details of the supplier of the safety data sheet**
- **Manufacturer/supplier:**  
Transocean Coatings  
Kossan Paint (M) Sdn. Bhd.  
1, Jalan Koporat 1/KU 9, Taman Perindustrian Meru  
42200 Kapar Selangor, Malaysia  
Phone: +60-3-33922799  
Fax: +60-3-33923799
- **Emergency telephone number:** Manufacturer/Supplier

### 2 Hazard identification

- **Classification of the substance or mixture**  

Flam. Liq. 2	H225 Highly flammable liquid and vapour.
Skin Irrit. 2	H315 Causes skin irritation.
Eye Irrit. 2	H319 Causes serious eye irritation.
Skin Sens. 1	H317 May cause allergic skin reaction.
Aquatic Chronic 3	H412 Harmful to aquatic life with long lasting effects.
- **Label elements**
- **GHS label elements**  
The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**  

  
 GHS02 GHS07
- **Signal word** Danger
- **Hazard-determining components of labelling:**  
xylene  
Bisphenol F-(epichlorhydrin) epoxy resin MW < 700.
- **Hazard statements**  
 H225 Highly flammable liquid and vapour.  
 H315 Causes skin irritation.  
 H319 Causes serious eye irritation.  
 H317 May cause allergic skin reaction.  
 H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**  
 P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking.  
 P233 Keep container tightly closed.  
 P240 Ground/bond container and receiving equipment.  
 P241 Use explosion-proof electrical/ ventilating/lighting equipment.

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- P261 Avoid breathing dust/fume/ gas/mist/vapours/spray.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- 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.
- 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 of the ingredients of the hazardous chemical

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

· **Dangerous components:**

28064-14-1	Bisphenol F-(epichlorhydrin) epoxy resin MW < 700. ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	≥10-<25%
1330-20-7	xylene ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	≥2.5-<10%
107-98-2	monopropylene glycol methyl ether ⚠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336	2.5-10%
71-36-3	butan-1-ol ⚠ Flam. Liq. 3, H226; ⚠ H318; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335-H336	≥3-<10%

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

### 4 First-aid measures

- **Description of first aid measures**
- **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. If symptoms persist, consult a doctor.
- **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.

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### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO<sub>2</sub>, 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:**  
Inform respective authorities in case of seepage into water course or sewage system.  
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).  
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:** Store in a cool location.
- **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:**

**107-98-2 monopropylene glycol methyl ether**

PEL (Malaysia) Long-term value: 369 mg/m<sup>3</sup>, 100 ppm

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**71-36-3 butan-1-ol**

PEL (Malaysia)	Ceiling limit: 152 mg/m <sup>3</sup> , 50 ppm (kulit)
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**· DNELs**

**1330-20-7 xylene**

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

**107-98-2 monopropylene glycol methyl ether**

Oral	long term DNEL	3.3 mg/kg/d (General Population)
	Dermal	long term DNEL 18.1 mg/kg/d (General Population) 50.6 mg/kg/d (Workers)
Inhalative	long term DNEL	43.9 mg/m <sup>3</sup> (General Population) 369 mg/m <sup>3</sup> (Workers)
	Acute DNEL	553.5 mg/m <sup>3</sup> (Workers)

**71-36-3 butan-1-ol**

Oral	long term DNEL	3,125 mg/kg/d (General Population)
	Inhalative	long term DNEL 55 mg/m <sup>3</sup> (General Population) 310 mg/m <sup>3</sup> (Workers)

**· PNECs**

**1330-20-7 xylene**

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)

**107-98-2 monopropylene glycol methyl ether**

PNEC STP	100 mg/l (water treatment plant)
PNEC aqua	10,000 ug/l (freshwater)
	41.6 mg/kg (freshwater)
PNEC sediment	4.17 mg/kg (marine water)
	2.47 mg/kg (Soil)

**71-36-3 butan-1-ol**

PNEC STP	2,476 mg/l (water treatment plant)
	2.25 mg/l (intermittent release)
PNEC aqua	8.2 ug/l (marine water)
	0.178 mg/kg (freshwater)
PNEC sediment	0.0178 mg/kg (marine water)
	0.015 mg/kg (Soil)

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

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- **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 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.

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 trough 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	114 °C

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· <b>Flash point:</b>	14 °C
· <b>Flammability (solid, gas)</b>	Not applicable.
· <b>Ignition temperature:</b>	460 °C
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto-ignition temperature</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· <b>Explosion limits:</b>	
Lower:	1.1 Vol %
Upper:	7 Vol %
· <b>Vapour pressure at 20 °C:</b>	6.7 hPa
· <b>Density at 20 °C:</b>	1.36607 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient: n-octanol/water</b>	Not determined.
· <b>Viscosity:</b>	
Dynamic:	Not determined.
Kinematic:	Not determined.
· <b>Solvent content:</b>	
VOC (EC)	227.3 g/l
· <b>Other information</b>	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:**

**28064-14-1 Bisphenol F-(epichlorhydrin) epoxy resin MW < 700.**

Oral	LD50	>2,000 mg/kg (rat)
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Dermal	LD50	>2,000 mg/kg (rat)
<b>1330-20-7 xylene</b>		
Oral	LD50	>2,000 mg/kg (rat)
	LC50/ 96 hr (static)	2.6 mg/l (Rainbow trout ( <i>Oncorhynchus mykiss</i> )) (OESO 203 or equivalent)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>20 mg/l (rat)
<b>107-98-2 monopropylene glycol methyl ether</b>		
Oral	LD50	4,016 mg/kg (rat)
	LC50/ 96 hr	6,812 mg/l (fish)
Dermal	LD50	2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	6 mg/l (rat)
<b>71-36-3 butan-1-ol</b>		
Oral	LD50	2,292 mg/kg (rat)
	LC50/ 96 hr	1,376 mg/l (fish)
Dermal	LD50	3,400 mg/kg (rabbit)
Inhalative	LC50/4 h	17.76 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion or irritation** Irritant to skin and mucous membranes.
- **Serious eye damage or eye irritation** Irritating effect.
- **Respiratory / skin sensitization** 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:  
Irritant

## 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

**28064-14-1 Bisphenol F-(epichlorhydrin) epoxy resin MW < 700.**

EC 50 (48 hr) 3.5 mg/l (daphnia)

**1330-20-7 xylene**

EC 50 (48 hr) 1-10 mg/l (daphnia)

EC 50 (72 hr) 1-10 mg/l (Algae)

**107-98-2 monopropylene glycol methyl ether**

EC 50 (48 hr) 23,300 mg/l (daphnia)

**71-36-3 butan-1-ol**

EC 50 (48 hr) 1,328 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.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish

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- **Additional ecological information:**
- **General notes:**  
Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water  
Do not allow product to reach ground water, water course or sewage system, even in small quantities.  
Danger to drinking water if even extremely small quantities leak into the ground.  
Harmful to aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal information

- **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 Transportation information

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>· <b>UN-Number</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | UN1263   |
| <ul style="list-style-type: none"> <li>· <b>UN proper shipping name</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG, IATA</b></li> </ul>  | 1263 PAINT, special provision 640D<br>PAINT  |
| <ul style="list-style-type: none"> <li>· <b>Transport hazard class(es)</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>  | <div style="text-align: center;">  </div> |
| <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>   | 3 Flammable liquids.<br>3  |
| <ul style="list-style-type: none"> <li>· <b>Packing group</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | II   |
| <ul style="list-style-type: none"> <li>· <b>Environmental hazards:</b></li> <li>· <b>Marine pollutant:</b></li> </ul>  | Yes  |
| <ul style="list-style-type: none"> <li>· <b>Special precautions for user</b></li> <li>· <b>Danger code (Kemler):</b></li> <li>· <b>EMS Number:</b></li> <li>· <b>Stowage Category</b></li> </ul> | Warning: Flammable liquids.<br>33<br>F-E, <u>S-E</u><br>B  |

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· <b>Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADR</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>Transport category</b>	2
· <b>Tunnel restriction code</b>	D/E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>UN "Model Regulation":</b>	UN 1263 PAINT, SPECIAL PROVISION 640D, 3, II

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **GHS label elements**  
The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS02 GHS07

- **Signal word** Danger
- **Hazard-determining components of labelling:**  
xylene  
Bisphenol F-(epichlorhydrin) epoxy resin MW < 700.
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H225 Highly flammable liquid and vapour.  
H315 Causes skin irritation.  
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H317 May cause allergic skin reaction.  
H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**  
P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ ventilating/lighting equipment.  
P261 Avoid breathing dust/fume/ gas/mist/vapours/spray.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

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- 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.
- 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** 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
- 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. 4: Acute toxicity - oral – Category 4
- Skin Irrit. 2: Skin corrosion or irritation – Category 2
- : Serious eye damage or eye irritation – Category 1A
- Eye Irrit. 2: Serious eye damage or eye irritation – Category 2
- Skin Sens. 1: Skin sensitization – Category 1
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- Aquatic Chronic 2: Hazardous to the aquatic environment - chronic hazard – Category 2
- Aquatic Chronic 3: Hazardous to the aquatic environment - chronic hazard – Category 3

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

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