

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

Printing date 24.10.2019

Vers.-Nr: 1

Revision: 24.10.2019

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

- **Product identifier**
- **Trade name: Transpoxy Tankguard 458 Hardener**
- **Article number:** 458b
- **Recommended use of the chemical and restrictions on use**  
No further relevant information available.
- **Application of the substance/preparation:** Paint
- **Details of the supplier of the safety data sheet**
- **Manufacturer/supplier:**  
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. 3	H226	Flammable liquid and vapour.
Acute Tox. 4	H302	Harmful if swallowed.
Skin Corr. 1A	H314	Causes severe skin burns and eye damage.
Eye Dam. 1	H318	Causes serious eye damage.
Skin Sens. 1	H317	May cause allergic skin reaction.
STOT RE 2	H373	May cause damage to organs through prolonged or repeated exposure.
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 GHS05 GHS07 GHS08

- **Signal word** Danger
- **Hazard-determining components of labelling:**  
Formaldehyde, polymer with benzeneamine, hydrogenated.  
Benzyl alcohol  
4,4'-methylenebis(cyclohexylamine)  
xylene
- **Hazard statements**  
H226 Flammable liquid and vapour.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H317 May cause allergic skin reaction.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**  
P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking.

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- P241 Use explosion-proof electrical/ ventilating/lighting equipment.
- P260 Do not breathe dusts or mists.
- 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.
- P405 Store locked up.
- 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:**

100-51-6	Benzyl alcohol ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332	25-50%
135108-88-2	Formaldehyde, polymer with benzeneamine, hydrogenated. ⚠ STOT RE 2, H373; ⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H302; Skin Sens. 1, H317; Aquatic Chronic 3, H412	25-50%
1330-20-7	xylene ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	≥2.5-<10%
1761-71-3	4,4'-methylenebis(cyclohexylamine) ⚠ STOT RE 2, H373; ⚠ Skin Corr. 1A, H314; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; Skin Sens. 1, H317	≥5-<10%
69-72-7	Salicylic acid ⚠ Repr. 2, H361; ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302	≥1-≤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:**  
Immediately remove any clothing soiled by the product.  
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.

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- **After swallowing:**  
Call for a doctor immediately.  
Drink plenty of water and provide fresh air. 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:** 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:** Mouth respiratory protective device.

### 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).  
Use neutralising agent.  
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:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· **DNELs**

#### 100-51-6 Benzyl alcohol

Oral	long term DNEL	5.7 mg/kg/d (General Population)
		9.5 mg/kg/d (Workers)
Dermal	long term DNEL	29 mg/kg/d (General Population)
		9.5 mg/kg/d (Workers)
Inhalative	long term DNEL	8.11 mg/m <sup>3</sup> (General Population)
		90 mg/m <sup>3</sup> (Workers)
	Acute DNEL	40 mg/m <sup>3</sup> (General Population) 450 mg/m <sup>3</sup> (Workers)

#### 135108-88-2 Formaldehyde, polymer with benzeneamine, hydrogenated.

Dermal	long term DNEL	2 mg/kg/d (Workers)
Inhalative	long term DNEL	0.2 mg/m <sup>3</sup> (Workers)
	Acute DNEL	2 mg/m <sup>3</sup> (Workers)

#### 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)

#### 69-72-7 Salicylic acid

Oral	long term DNEL	4 mg/kg/d (General Population)
		1 mg/kg/d (Workers)
Dermal	long term DNEL	1 mg/kg/d (General Population)
		2 mg/kg/d (Workers)
Inhalative	long term DNEL	16 mg/m <sup>3</sup> (General Population)
		4 mg/m <sup>3</sup> (Workers)

· **PNECs**

#### 135108-88-2 Formaldehyde, polymer with benzeneamine, hydrogenated.

PNEC STP	1.9 mg/l (water treatment plant)
PNEC aqua	15 ug/l (freshwater)
	1.5 ug/l (marine water)
PNEC sediment	15 mg/kg (freshwater)
	1.5 mg/kg (marine water)
PNEC soil	1.8 mg/kg (soi)

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### 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)

### 69-72-7 Salicylic acid

PNEC STP	162 mg/l (water treatment plant)
PNEC aqua	200 ug/l (freshwater) 20 ug/l (marine water)
PNEC sediment	1.42 mg/kg (freshwater) 0.142 mg/kg (marine water)
PNEC soil	0.166 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 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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· **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** 137-143 °C

· **Flash point:** 25 °C

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

· **Ignition temperature:** 435 °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:** 1.3 Vol %

· **Upper:** 13 Vol %

· **Vapour pressure at 20 °C:** 0.1 hPa

· **Density at 20 °C:** 1.01562 g/cm<sup>3</sup>

· **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)** 500.0 g/l

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· **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:**

#### 100-51-6 Benzyl alcohol

Oral	LD50	1,230 mg/kg (rat)
	LC50/ 96 hr	460 mg/l (fish)
Dermal	LD50	2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>4 mg/l (rat)

#### 135108-88-2 Formaldehyde, polymer with benzeneamine, hydrogenated.

Oral	LD50	368 mg/kg (rat)
	LC50/ 96 hr	63 mg/l (fish)
Dermal	LD50	>1,000 mg/kg (rab)

#### 1330-20-7 xylene

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)

#### 1761-71-3 4,4'-methylenebis(cyclohexylamine)

Oral	LD50	>670 mg/kg (rat)
	LC50/ 96 hr	>100 mg/l (fish)

#### 69-72-7 Salicylic acid

Oral	LD50	891 mg/kg (rat)
	LC50/ 96 hr	1,370 mg/l (fish)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50/4 h	0.9 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion or irritation** Caustic effect on skin and mucous membranes.
- **Serious eye damage or eye irritation** Strong caustic effect.
- **Respiratory / skin sensitization** 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  
Corrosive  
Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

### 12 Ecological information

· **Toxicity**

· **Aquatic toxicity:**

**100-51-6 Benzyl alcohol**

EC50	640 mg/l (Algae)
EC 50 (48 hr)	230-400 mg/l (daphnia)

**135108-88-2 Formaldehyde, polymer with benzeneamine, hydrogenated.**

EC 50 (48 hr)	18.6 mg/l (daphnia)
EC 50 (72 hr)	43.94 mg/l (Algae)

**1330-20-7 xylene**

EC 50 (48 hr)	1-10 mg/l (daphnia)
EC 50 (72 hr)	1-10 mg/l (Algae)

**1761-71-3 4,4'-methylenebis(cyclohexylamine)**

EC 50 (48 hr)	9.24 mg/l (daphnia)
EC 50 (72 hr)	140-200 mg/l (Algae)

**69-72-7 Salicylic acid**

EC50 (static)	380 mg/l (Bacteria)
EC 50 (48 hr) (static)	870 mg/l (daphnia)
EC 50 (72 hr)	>100 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.

· **Ecotoxicological effects:**

· **Remark:** Harmful to fish

· **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.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

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.

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· **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

· <b>UN-Number</b>	
· <b>ADR, IMDG, IATA</b>	UN1263
· <b>UN proper shipping name</b>	
· <b>ADR</b>	1263 PAINT
· <b>IMDG, IATA</b>	PAINT
· <b>Transport hazard class(es)</b>	
· <b>ADR, IMDG, IATA</b>	
	
· <b>Class</b>	3 Flammable liquids.
· <b>Label</b>	3
· <b>Packing group</b>	
· <b>ADR, IMDG, IATA</b>	I
· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b>	Warning: Flammable liquids.
· <b>Danger code (Kemler):</b>	30
· <b>EMS Number:</b>	F-E,S-E
· <b>Stowage Category</b>	B
· <b>Stowage Code</b>	SW2 Clear of living quarters.
· <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>	500 ml
· <b>Excepted quantities (EQ)</b>	Code: E3 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 300 ml
· <b>Transport category</b>	1
· <b>Tunnel restriction code</b>	D/E

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· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	500 ml
· <b>Excepted quantities (EQ)</b>	Code: E3 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 300 ml
· <b>UN "Model Regulation":</b>	UN 1263 PAINT, 3, I

### 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 GHS05 GHS07 GHS08

- **Signal word** Danger
- **Hazard-determining components of labelling:**  
Formaldehyde, polymer with benzeneamine, hydrogenated.  
Benzyl alcohol  
4,4'-methylenebis(cyclohexylamine)  
xylene
- **Hazard statements**  
H226 Flammable liquid and vapour.  
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H314 Causes severe skin burns and eye damage.  
H317 May cause allergic skin reaction.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**  
P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking.  
P241 Use explosion-proof electrical/ ventilating/lighting equipment.  
P260 Do not breathe dusts or mists.  
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.  
P405 Store locked up.  
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

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- **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:**

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. 1A: Skin corrosion or irritation – Category 1A

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

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

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

Skin Sens. 1: Skin sensitization – Category 1

Repr. 2: Reproductive toxicity – Category 2

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

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.**

MY