



Printing date 16.08.2021 Version number 2 Revision: 16.08.2021

I Identification of the hazardous chemical and of the supplier

- · Product identifier
- · Trade name: Kosurethane Finish
- · Article number: PUF-3060 B
- · Recommended use of the chemical and restrictions on use No further relevant information available.
- · Application of the substance / the mixture Coating material
- Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

KOSSAN PAINT (M) SDN. BHD.

1, Jalan Koporat 1/KU9, Taman

Perindustrian Meru, 42200 Kapar,

Selangor Darul Ehsan, Malaysia.

· Further information obtainable from:

Product safety department.

lsk@kossanpaint.com.my
• Emergency telephone number:

Manufacturer/supplier

603-33922799

2 Hazard identification

· Classification of the substance or mixture



Flam. Liq. 3 H226 Flammable liquid and vapour.



STOT RE 2 H373 May cause damage to the hearing organs through prolonged or repeated exposure.



Skin Irrit. 2 H315 Causes skin irritation.

- · Label elements
- GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
- · Hazard pictograms GHS02, GHS07, GHS08
- · Signal word Warning
- · Hazard-determining components of labelling: ethyl benzene

· Hazard statements

Flammable liquid and vapour.

Causes skin irritation.

May cause damage to the hearing organs through prolonged or repeated exposure.

(Contd. on page 2)

Printing date 16.08.2021 Version number 2 Revision: 16.08.2021

Trade name: Kosurethane Finish

(Contd. of page 1)

· Precautionary statements

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

Use explosion-proof electrical/ventilating/lighting equipment.

Do not breathe dust/fume/gas/mist/ vapours/spray.

Wear protective gloves/protective clothing/eve protection/face protection.

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

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:				
100-41-4	ethyl benzene	≥10-≤20%		
	♦ Flam. Liq. 2, H225; ♦ STOT RE 2, H373; Asp. Haz., H304; ♦ Acute Tox. 4, H332			
108-65-6	2-methoxy-1-methylethyl acetate	<13.0%		
	♠ Flam. Liq. 3, H226			
1330-20-7	xylene	≥10-<13%		
	♦ Flam. Liq. 3, H226; ♦ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315			
822-06-0	hexamethylene diisocyanate	<i>≥</i> 0.1- <i>≤</i> 0.2%		
	Acute Tox. 3, H311; Acute Tox. 3, H331; Resp. Sens. 1, H334; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335			

[·] 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 eve 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.

MV

Printing date 16.08.2021 Version number 2 Revision: 16.08.2021

Trade name: Kosurethane Finish

(Contd. of page 2)

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.
- · 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:

100-41-4 ethyl benzene (≥10-≤20%)

PEL (Malaysia) Long-term value: 434 mg/m³, 100 ppm

822-06-0 hexamethylene diisocyanate (≥0.1-≤0.2%)

PEL (Malaysia) Long-term value: 0.034 mg/m³, 0.005 ppm

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

(Contd. on page 4)

Printing date 16.08.2021 Version number 2 Revision: 16.08.2021

Trade name: Kosurethane Finish

(Contd. of page 3)

- · 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.

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: Liquid
Colour: Colourless
Odour: Aromatic
Odour threshold: Not determined.

· pH-value: Not determined.

Change in condition

Melting point/freezing point Undetermined.

Initial boiling point and boiling range 139 °C

· Flash point: 38 °C

· Flammability (solid, gas) Not applicable.

(Contd. on page 5)

Printing date 16.08.2021 Version number 2 Revision: 16.08.2021

Trade name: Kosurethane Finish

	(Contd. of page
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/vapou mixtures are possible.
Explosion limits: Lower: Upper:	Not determined. Not determined.
Vapour pressure:	Not determined.
Density at 20 °C: Relative density Vapour density Evaporation rate	1.07 g/cm³ Not determined. Not determined. Not determined.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
Partition coefficient: n-octanol/water	Not determined.
· Viscosity: Dynamic at 20°C: Kinematic:	250 mPas Not determined.
Solvent content:	
Solids content:	75.0 %
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/LC5	· LD/LC50 values relevant for classification: 100-41-4 ethyl benzene				
100-41-					
Oral	LD50	3,500 mg/kg (rat)			
Dermal	LD50	17,800 mg/kg (rabbit)			
1330-20)-7 xyle	ne			
Oral	LD50	4,300 mg/kg (rat)			
	•	(Contd on page 6)			

d. on page

Printing date 16.08.2021 Version number 2 Revision: 16.08.2021

Trade name: Kosurethane Finish

(Contd. of page 5)

Dermal LD50 2,000 mg/kg (rabbit)

- · Primary irritant effect:
- · Skin corrosion or irritation No irritant effect.
- · 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:

Harmful

Irritant

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 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 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				
· UN-Number · ADR, IMDG, IATA	UNI 263			
· UN proper shipping name · ADR	1263 PAINT			
· IMDG. IATA	PAINT			

(Contd. on page 7)

Printing date 16.08.2021 Version number 2 Revision: 16.08.2021

Trade name: Kosurethane Finish

(Contd. of page 6)

· Transport hazard class(es)

 $\cdot ADR$



· Class 3 Flammable liquids.

· IMDG, IATA



Class 3 Flammable liquids.

· Label

· Packing group · ADR, IMDG, IATA

ADR, IMDG, IATA

· Environmental hazards:

· Marine pollutant: No

· Special precautions for user Warning: Flammable liquids.

· EMS Number: F-E,S-E

· Transport in bulk according to Annex II of Marpol

and the IBC Code Not applicable.

· UN "Model Regulation": UN 1263 PAINT, 3, III

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, GHS08
- · Signal word Warning
- · Hazard-determining components of labelling:

ethyl benzene

· Hazard statements

Flammable liquid and vapour.

Causes skin irritation.

May cause damage to the hearing organs through prolonged or repeated exposure.

· Precautionary statements

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

Use explosion-proof electrical/ventilating/lighting equipment.

Do not breathe dust/fume/gas/mist/ vapours/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

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

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

(Contd. on page 8)

Printing date 16.08.2021 Version number 2 Revision: 16.08.2021

Trade name: Kosurethane Finish

(Contd. of page 7)

- 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.

- · Department issuing SDS: Product safety department.
- · Contact: Mr. S.K. Lim
- · Abbreviations and acronyms:

ADR: Accord relatif au transport international 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)

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 - oral - Category 3

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

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

Eye Irrit. 2: Serious eye damage or eye irritation – Category 2

Resp. Sens. 1: Respiratory sensitization – Category 1

Skin Sens. 1: Skin sensitization – 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. Haz.: Aspiration hazard - Category 1

MY

^{* *} Data compared to the previous version altered.