

1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** Kossan Epoxy Filler Part B
- **Article number:** KF-B
- **Application of the substance / the preparation** Epoxy sealing
- **Manufacturer/Supplier:**
KOSSAN PAINT (M) SDN. BHD.
1, Jalan Koporat 1/KU 9, Taman Perindustrian Meru
42200 Kapar, Selangor D.E. Malaysia.
- **Further information obtainable from:**
Product safety department.
lskheong@kop.com.my
- **Information in case of emergency:** Manufacturer/supplier

2 Hazards identification

- **Hazard description:**



T Toxic

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 60 May impair fertility.

R 61 May cause harm to the unborn child.

R 21/22 Also harmful in contact with skin and if swallowed.

R 34 Causes burns.

R 43 May cause sensitisation by skin contact.

R 48/20 Also harmful: danger of serious damage to health by prolonged exposure through inhalation.

R 63 Possible risk of harm to the unborn child.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **GHS label elements**



Danger

H360 - May damage fertility or the unborn child.

H373 - May cause damage to organs through prolonged or repeated exposure.



Danger

H314 - Causes severe skin burns and eye damage.



Warning

H302 - Harmful if swallowed.

H317 - May cause an allergic skin reaction.

- **Prevention:**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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Response:

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 or doctor/physician.**

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/information on ingredients

Chemical characterization

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 25036-25-3	Epoxy resin Xi; R 36/38-43 Warning: 3.2/2, 3.3/2, 3.4.S/1	10-25%
CAS: 111-40-0 EINECS: 203-865-4	2,2'-iminodiethylamine C, Xn; R 21/22-34-43 Danger: 3.2/1B Warning: 3.1.O/4, 3.1.D/4, 3.4.S/1	10-25%
CAS: 108-88-3 EINECS: 203-625-9	toluene Xn, Xi, F; R 11-38-48/20-63-65-67 Danger: 2.6/2; 3.10/1, 3.7/2, 3.9/2 Warning: 3.2/2, 3.8/3	10-25%
CAS: 110-80-5 EINECS: 203-804-1	2-ethoxyethanol T; R 60-61-10-20/21/22 Danger: 3.7/1B Warning: 2.6/3; 3.1.O/4, 3.1.D/4, 3.1.I/4	2.5-10%
CAS: 1330-20-7 EINECS: 215-535-7	xylene Xn, Xi; R 10-20/21-38 Warning: 2.6/3; 3.1.D/4, 3.1.I/4, 3.2/2	2.5-10%
CAS: 78-83-1 EINECS: 201-148-0	butanol Xi; R 10-37/38-41-67 Danger: 3.3/1 Warning: 2.6/3; 3.8/3; 3.2/2	2.5-10%
CAS: 108-95-2 EINECS: 203-632-7	phenol T, C; R 23/24/25-34-48/20/21/22-68 Danger: 3.1.O/3, 3.1.D/3, 3.1.I/3; 3.2/1B Warning: 3.5/2, 3.9/2	≤ 2.5%

Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

General information:

Immediately remove any clothing soiled by the product.

No special measures required.

After inhalation: Supply fresh air; consult doctor in case of complaints.

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:**
If symptoms persist consult doctor.
Drink plenty of water and provide fresh air. Call for a doctor immediately.

5 Fire-fighting measures

- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
- **Measures for cleaning/collecting:**
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **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.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:**

Talc (Mg₃H₂(SiO₃)₄)

NON-METALLIC HYDRATED MAGNESIUM SILICATE MINERAL, (3MGO.4SIO₂.H₂O) (25-50%)

WEL Long-term value: 1 mg/m³

111-40-0 2,2'-iminodiethylamine (10-25%)

WEL Long-term value: 4.3 mg/m³, 1 ppm
Sk

108-88-3 toluene (10-25%)

WEL Short-term value: 384 mg/m³, 100 ppm
Long-term value: 191 mg/m³, 50 ppm
Sk

110-80-5 2-ethoxyethanol (2.5-10%)

WEL Long-term value: 37 mg/m³, 10 ppm
Sk

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1330-20-7 xylene (2.5-10%)

WEL Short-term value: 441 mg/m³, 100 ppm
 Long-term value: 220 mg/m³, 50 ppm
 Sk; BMGV

78-83-1 butanol (2.5-10%)

WEL Short-term value: 231 mg/m³, 75 ppm
 Long-term value: 154 mg/m³, 50 ppm

108-95-2 phenol (≤2.5%)

WEL Long-term value: 2 ppm
 Sk

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

· **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.

Store protective clothing separately.

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.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **General Information**

Form: Paste Form
Colour: According to product specification
Odour: Characteristic

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· Change in condition <i>Melting point/Melting range: Undetermined.</i> <i>Boiling point/Boiling range: 135°C</i>	
· Flash point:	40°C
· Ignition temperature:	235°C
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	1.0 Vol %
Upper:	10.0 Vol %
· Vapour pressure at 20°C:	29 hPa
· Density at 20°C:	1.2 g/cm ³
· Solubility in / Miscibility with water:	Insoluble.
· Solvent content:	
Organic solvents:	14.0 %
VOC (EC)	0.00 %
· Solids content:	86.0 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

111-40-0 2,2'-iminodiethylamine

Oral	LD50	1080 mg/kg (rat)
Dermal	LD50	1090 mg/kg (rabbit)

108-88-3 toluene

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	12124 mg/kg (rabbit)
Inhalative	LC50/4 h	5320 mg/l (mouse)

110-80-5 2-ethoxyethanol

Oral	LD50	3000 mg/kg (rat)
Dermal	LD50	3300 mg/kg (rabbit)
Inhalative	LC50/4 h	2000 mg/l (rat)

1330-20-7 xylene

Oral	LD50	4300 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** Caustic effect on skin and mucous membranes.

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- **on the eye:** Strong caustic effect.
- **Sensitization:** Sensitization 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
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**

- **General notes:** Must not reach sewage water or drainage ditch undiluted or unneutralized.

* **13 Disposal considerations**

- **Product:**
- **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**

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 Flammable liquids.
- **UN-Number:** 1263
- **Packaging group:** III
- **Hazard label:** 3
- **Description of goods:** Paint

- **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 1263
- **Label** 3
- **Packaging group:** III
- **EMS Number:** F-A,S-B
- **Marine pollutant:** No
- **Proper shipping name:** Paint

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· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1263
- **Label** 3
- **Packaging group:** III
- **Proper shipping name:** Paint
- **UN "Model Regulation":** UN1263, Paint, 3, III

15 Regulatory information

· **Labelling according to EU guidelines:**

Observe the general safety regulations when handling chemicals.

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Code letter and hazard designation of product:** T Toxic

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

Epoxy resin

toluene

2,2'-iminodiethylamine

2-ethoxyethanol

· **Risk phrases:**

60 May impair fertility.

61 May cause harm to the unborn child.

21/22 Also harmful in contact with skin and if swallowed.

34 Causes burns.

43 May cause sensitisation by skin contact.

48/20 Also harmful: danger of serious damage to health by prolonged exposure through inhalation.

63 Possible risk of harm to the unborn child.

· **Safety phrases:**

53 Avoid exposure - obtain special instructions before use.

1/2 Keep locked up and out of the reach of children.

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.

· **Relevant R-phrases**

10 Flammable.

11 Highly flammable.

20/21 Harmful by inhalation and in contact with skin.

20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

21/22 Harmful in contact with skin and if swallowed.

23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

34 Causes burns.

36/38 Irritating to eyes and skin.

37/38 Irritating to respiratory system and skin.

38 Irritating to skin.

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- 41 Risk of serious damage to eyes.
 43 May cause sensitisation by skin contact.
 48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
 48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
 60 May impair fertility.
 61 May cause harm to the unborn child.
 63 Possible risk of harm to the unborn child.
 65 Harmful: may cause lung damage if swallowed.
 67 Vapours may cause drowsiness and dizziness.
 68 Possible risk of irreversible effects.

· **Department issuing MSDS:** Product safety department.

· **Contact:** Mr. S.K. Lim

· **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)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

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