



SAFETY DATA SHEET

Product Name : MIRAC #100 PRIMER HARDENER
SDS Ref. No : SDS-6013
Revision : 07
Date of issue : 16.04.2024

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Name MIRAC #100 PRIMER HARDENER
Product Description Two pack high build epoxy polyamide cured primer
Recommended Use As a primer/ sealer for protective and decorative coating systems
Company Identification **SKK (S) PTE LTD**
No 14 Pandan Road, Singapore 609262
Emergency Telephone Number (65) 6 274 0020
Fax Number (65) 6 278 0060
Website www.skk.com.sg

2. HAZARDS IDENTIFICATION

GHS Classification:

Physical Hazard

Flammable Liquids Category 3

Health Hazard

Skin corrosion/ irritation Category 2
Serious eye damage Category 1

Environmental Hazard

Not classified as an environmental hazard under GHS criteria

GHS Pictogram



Signal Word

Danger

Hazard Statements

H226 : Flammable liquid and vapor
H315 : Causes skin irritation
H318 : Causes serious eye damage

Precautionary Statements

P210 : Keep away from heat/sparks/open flames/hot surface. No smoking
P261 : Avoid breathing dust/fumes/gas/mist/vapours/spray



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Response

P303 + P361 + P353 : IF ON SKIN (or hair) : 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

P370 + P378 :In case of fire: Use appropriate media for extinction

Storage

P405: Store locked up

P403 + P233 : Store in a well ventilated place. Keep container tightly closed

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

Disposal

P501 : Dispose of contents/container to appropriate waste site or reclaimer in accordance with local or national regulations

3. COMPOSITION/INFORMATION ON INGREDIENTS

| SUBSTANCES | CAS NO. | PERCENTAGE,% |
|------------|------------|--------------|
| Xylene | 1330-20-7 | 30 - 40% |
| Isobutanol | 78-83-1 | 10 - 15 % |
| Polyamide | 68410-23-1 | 40 - 45 % |

4. FIRST AID MEASURES

Inhalation

: Supply to fresh air and call for medical assistance immediately.
If not breathing, give artificial respiration, if breathing is difficult, give oxygen.
Keep at rest

Skin Contact

: Wash skin with mild soap and water immediately. Remove all contaminated clothes and shoes. Wash contaminated clothing before re-use.
If skin irritation persists, call a physician

Eye contact

: In case of eye contact, immediately rinse with clean water for at least 15 minutes. Get medical attention if irritation persists

Ingestion

: Do not induce vomiting. Rinse mouth with plenty of water.
Get immediate medical advice/attention immediately



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5. FIRE - FIGHTING MEASURES

Suitable extinguishing media : Carbon dioxide, alcohol - resistant foam or dry chemical type

Unsuitable extinguishing media : No data available

Specific hazards arising from the mixture :

Incomplete combustion may form carbon monoxide.

May generate ammonia gas

May generate toxic nitrogen oxide gases

May form explosive mixtures in air

Special Protective Equipment for Fire Fighter:

- Wear full protective clothing and NIOSH – approved self-contained breathing apparatus.
- Use water spray to cool fire-exposed surfaces and to protect personnel. If a leak or spill has not ignited, use water spray to disperse the vapours.
- Avoid spraying water directly into storage containers.
- Closed containers may explode when exposed to extreme heat.
- Avoid spreading burning liquid with water; isolate liquid.
- Do not allow runoff from fire fighting to enter drains or watercourses.
- If possible, isolate product from heat, electrical equipments, sparks and open flames.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with Spilled material. Warn or evacuate occupants in surrounding and downwind areas if required, due to toxicity or flammability of the material

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Discharge into the environment must be avoided. Do not let product enter drains. Do not flush into surface water or sanitary sewer system. Collect contaminated fire extinguishing water separately, this must not be discharged into drains

Methods and materials for containments and Cleaning up

Transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal.

Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid breathing mist or vapors. Avoid contact with skin. Use non-sparking tools and explosion proof equipment. Use only with adequate ventilation. Use proper bonding and/or earthing procedures. Prevent small spills and leakage to avoid slip hazard



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Conditions for safe storage, including any incompatibilities

Keep containers tightly closed. Store in a cool, dry and well - ventilated place and accordance with local regulations.
Keep away from incompatible materials, ignition sources and do not smoke. Keep out of the reach of children

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters/Occupational Limits

No exposure limit value known but if this product contains ingredients with exposure limits, all personnel and workplace atmosphere must ensure work carry out in an adequate ventilated condition.

Wear full protective clothing and use of NIOSH – approved respirators with organic vapour cartridges is recommended

Appropriate Engineering Control Measures

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits

Ensure eyewash stations and safety showers are close to the workstation location

Personal protective equipment

| | |
|---------------------------------|--|
| Respiratory protection | : Use of appropriate respiratory protective equipment is recommended |
| Hand protection | : Use of chemical resistant type of protective gloves is recommended |
| Eye protection | : Use of safety glasses with side shield is recommended |
| Skin and body protection | : Wear chemical resistant clothes and safety shoes when handling product |

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|------------------------------------|--------------------------------------|
| Form | : Liquid |
| Color | : Light to medium clear amber colour |
| Odour | : Aromatic hydrocarbon odour |
| Melting point | : Not available |
| Boiling point | : > 108.1 °C |
| Flash point | : 28°C |
| Specific gravity Range | : 0.92 ± 0.05 |
| Lower and upper flammability limit | : Not available |
| Vapour pressure | : Not available |
| Spontaneous ignition temperature | : Not available |

10. STABILITY AND REACTIVITY

Reactivity

No dangerous reaction known under condition of normal use

Chemical stability

Stable under ordinary conditions of use and storage



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Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reaction will not occur

Conditions to avoid

Heat, open flame and other ignition sources

Incompatible Materials

Strong oxidizing agents

Hazardous decomposition products

Carbon Dioxide and Carbon Monoxide may be formed by incomplete combustion

11. TOXICOLOGICAL INFORMATION

There is no data available on the product itself

Toxicological information of substances:

Acute Oral toxicity

Harmful if swallowed

| <u>Substances</u> | <u>Oral LD50 (Rat), mg/kg</u> |
|-------------------|-------------------------------|
| Xylene | 4300 |
| Isobutanol | 3300 |
| Polyamide | Data not available |

Acute dermal/skin toxicity

May caused skin Irritation if in contact with skin

| <u>Substances</u> | <u>Dermal LD50 (Rabbit), mg/kg</u> |
|-------------------|------------------------------------|
| Xylene | Data not available |
| Isobutanol | 2460 |
| Polyamide | Data not available |

Acute inhalation toxicity

May caused irritating to eyes and respiratory tract if inhaled

| <u>Substances</u> | <u>Inhalation vapor LC50 (Rat), mg/L/4hr</u> |
|-------------------|--|
| Xylene | 5000 |
| Isobutanol | Data not available |
| Polyamide | Data not available |

Skin Corrosion or Irritation

May cause skin irritation



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Serious eye damage or Irritation

May be an eye irritant

Respiratory or skin sensitisation

May be irritating to eyes and respiratory tract

Germ cell mutagenicity

No information available on the product

Carcinogenicity

No information available on the product

Reproductive toxicity

No information available on the product

Specific Target Organ Toxicity (STOT)- Single Exposure

No information available on the product

Specific Target Organ Toxicity (STOT)- Repeated Exposure

No information available on the product

Asphyxiation hazard

May be harmful if swallowed and enters airways

12. ECOLOGICAL INFORMATION

Toxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Result of PBT and vPvB assessment

No data available

Other adverse effects

No data available



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13. DISPOSAL CONSIDERATIONS

Recycle wherever possible. Consult manufacturer for recycling options

Do not dispose into the environment, in drains or in water courses

Method of waste disposal are incineration or biological treatment in state/federal approved facility and must be accordance with local waste and environmental authority requirements

Empty containers should be recycled or disposed through an approved waste licensed contractor

14. TRANSPORT INFORMATION

Transport to be in accordance with ADR/RID for road/rail, IMDG for sea and IATA for Air

LAND TRANSPORT

Classified as Dangerous Goods by the criteria of the European Agreement concerning the international carriage of Dangerous Goods (ADR) by Road & Regulations concerning the international carriage of Dangerous goods (RID) by Rail.

UN Number 1263
Proper shipping name PAINT (including paint,lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL
(including paint thinning or reducing compound)
Class 3
Packing Group III

SEA TRANSPORT

Classified as Dangerous Goods by the International Maritime Dangerous Goods Code (IMDG Code) criteria for transport of Sea.

UN Number 1263
Proper shipping name PAINT (including paint,lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL
(including paint thinning or reducing compound)
Class 3
Packing Group III
Marine Pollutant No

AIR TRANSPORT

Classified as Dangerous Goods by the criteria of International Air Transport Association (IATA) Dangerous Goods Regulations for transport by Air.

UN Number 1263
Proper shipping name PAINT (including paint,lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL
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15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this product.

Applicable national regulations:

Standard on Hazard communication for hazardous chemicals and dangerous goods

SS-586: Part 1: 2021- Transport and storage of dangerous goods

SS-586: Part 2 :2022 – GHS of classification and labelling of chemicals

SS-586: Part 3: 2022- Preparation of safety data sheet

MOM : Workplace Safety and Health Act & Workplace Safety and Health (General Provisions) Regulations
This product is subject to SDS, labelling, PEL and other requirements in the Acts/Regulations

NEA: Environmental Protection and Management Act & Environmental Protection and management
(Hazardous Substances) Regulations

This product is not subject to control under this Acts/Regulations

SCDF : Fire Safety Act & Fire Safety(Petroleum and Flammable Materials) Regulations
This product is subject to the requirements of this Acts/Regulations

SPF : The Arms and Explosive Act, the Arms and Explosives (Explosives) Rules, and the Arms and Explosives
(Explosive Precursors) Rules
This product is not subject to the requirement of this Acts/Regulations

16. OTHER INFORMATION

Disclaimer

To the best of our knowledge, the information contained herein is accurate and the source of information which we have obtained is believed to be reliable. However, we cannot assume any liability for the accuracy or completeness of this information. Due to the conditions of handling, storage, use and disposal of this product are beyond our control, we shall not be liable for any damages incurred by the use of this product.

All materials may present unknown hazards and should be always used with caution.

This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable