



(1) CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Details

Product Name : Optoelectronic epoxy resin
Manufacturer's Code : SM0331UV (part B)
Use : Clear epoxy hardener for encapsulating of mainly optoelectronics devices

1.2 Company Identification

Manufacturer's Name : Oriem Technology Sdn. Bhd.
Manufacturer's Address : Plot 25, Bayan Lepas Industrial Estate,
Non-FTZ, Phase 4, 11900 Bayan Lepas,
Penang, Malaysia.
Tel. No. : +6-04-642 6363
Fax. No. : +6-04-642 6369
Email : sales@cape.com.my
<http://www.cape.com.my>

1.3 Emergency Telephone

Designation : Managing Director
Tel. No. : +6-04-642 6363

(2) HAZARD IDENTIFICATION

Hazard pictogram



Signal word: Harmful
Most important hazards:
Harmful if swallowed
Causes skin and eye irritation

(3) COMPOSITION / INFORMATION ON INGREDIENTS

| <i>Chemical Name / Chemical Group</i> | <i>CAS No.</i> | <i>Proportion</i> | <i>Exposure Limit</i> |
|--|----------------|-------------------|-----------------------|
| Methylhexahydrophthalic anhydride with | 19438-60-9 | 80% | Not established |
| Cycloaliphatic anhydride | 85-42-7 | 20% | Not established |

(4) FIRST AID MEASURES

Ingestion : Induce vomiting. Get medical attention immediately.
Eye contact : Immediately flush with plenty of water for at least 15 minutes.
Get medical attention.
Skin contact : Immediately flush with plenty of water for at least 15 minutes.
Get medical attention.
Inhalation : Remove victim to fresh air. If breathing is difficult, give oxygen

(5) FIRE FIGHTING MEASURES

Extinguishing Media : Use dry chemical, foam, water jet or carbon dioxide
Fire Fighting Instruction : Shut off fuel to fire if it is possible to do so without hazard.
For small out door fires, portable fire extinguishers may be used, and self contained breathing apparatus (SCBA) may not be required. Respiratory and eye protections are required for fire fighting personnel.
Special hazards : COx as decomposition products.

(6) ACCIDENTAL RELEASE MEASURES

Leak / Spill : Absorb with sand or sawdust.
Report as per regulatory requirements.
Environmental Protection : Do not allow to enter drainage system, surface or ground water.

(7) HANDLING AND STORAGE

Handling : No special precaution is necessary. Observed good industrial housekeeping practices as for any rubber material. Prevent contact with eyes and skin. Wear goggles and rubber gloves.
Storage : Store in cool & dry place in tightly closed containers.

(8) EXPOSURE CONTROL AND PERSONAL PROTECTION

a. Exposure Limit

| Chemical Name | Standards* | Reference |
|-----------------------------------|-------------------|------------------|
| Methylhexahydrophthalic anhydride | N.E. | OSHA, ACGIH |
| Proprietary additives | N.E. | OSHA, ACGIH |

*NOTE: * Eight-hour time-weighted average exposure unless stated otherwise
N.E. – Not Established
OSHA – Occupational Safety and Health Act
ACGIH – American Conference of Government Industrial Hygienists*

b. Ventilation

Use general or local exhausts ventilation.

c. Personal Protection

Eye/skin protection : Safety goggles & cotton gloves are recommended.
Respiratory Protection : Not required where adequate ventilation conditions exist but face mask is advised. If airborne concentration exceeds exposure level, a high efficiency particulate respirator is recommended.

(9) PHYSICAL AND CHEMICAL PROPERTIES

| | |
|------------------------------------|------------------------------------|
| Appearance | : Clear/ slightly yellowish liquid |
| Odour | : Aromatic |
| Solubility | : Slightly soluble |
| Boiling Point (°C) | : 145 @ 3mm Hg |
| Crystalline point (°C) | : Not applicable |
| Vapour Pressure (mm of Hg at 25°C) | : Not determined |
| Percentage Volatiles | : Not determined |
| Evaporation Rate | : Not established |
| Vapour Density | : Not applicable |
| Flash Point (°C) | : 149 |
| Autoignition Temperature (°C) | : Not established |
| Decomposition Temperature (°C) | : > 220 |
| Flammable limit (%) | : Not available |
| Explosive/oxidizing properties | : Not to be expected |

(10) STABILITY AND REACTIVITY

| | |
|--------------------------|--|
| Stability | : Stable under ordinary conditions of use and storage. |
| Conditions to avoid | : Excess heat, flame and sources of ignition |
| Incompatibles | : Acid, base, hydrocarbon solvent and oxidizing materials |
| Decompositions Products | : Oxide of carbon, nitrogen |
| Hazardous polymerization | : Will not occur by itself, but masses more than 500g of products with an aliphatic amine will cause irreversible polymerization with considerable heat buildup. |

(11) TOXICOLOGICAL INFORMATION

Toxicity Data

Oral : LD50 4.040mg/kg (rat)

Carcinogenicity

No data

Reproductive Effect

No data

Effects of overexposure

The product has primary irritant effect on the skin, mucous membranes, and eyes

Chronic Effects

No data

Target Organs

Eyes and skin

(12) ECOLOGICAL INFORMATION

No data available

(13) DISPOSAL INFORMATION

Disposal of waste to be carry out at the city, state or federally permitted disposal facility. Handle in accordance with applicable regulations and/or local authorities.

(14) TRANSPORTATION INFORMATION

Land transport ADR/RID (cross-border)

ADR/RID Class: Not Regulated.

Maritime transport IMDG

IMDG Class: Not Regulated

Air transport ICAO-TI and IATA-DGR

ICAO/IATA Class: Not Regulated

(15) REGULATORY INFORMATION

This product has been adopted according to the GHS of Classification and Labeling of Chemicals worldwide, and the SDS contains all required information.

(16) OTHER INFORMATION

a. Proposed classification: Irritant

b. Hazard statement

H302 Harmful if swallowed

H315/320 Irritate to eyes and skin

c. Precautionary statement

P280 Wear suitable gloves and face protection

P338 Removes contact lenses, if present and easy to do. Continue rinsing

P351 Rinse cautiously with water for several minutes

P352 Wash with plenty of soap and water

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