

SAFETY DATA SHEET

PRODUCT NAME: "SUMIKON®" EME-G770HJ
MSDS NO.: MSDS-EME-1368
DATE PREPARED: Jan,17,2011

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: "SUMIKON®" EME-G770HJ
CHEMICAL NATURE: EPOXY MOLDING COMPOUND
APPLICATION: Encapsulation of Semiconductors (or electronic devices and so forth) for electrical, physical and chemical protection.
MANUFACTURER: SUMITOMO BAKELITE CO., LTD.
TENNOZ PARK SIDE BLDG., 5-8, HIGASHI-SHINAGAWA 2-CHOME,
SHINAGAWA-KU, TOKYO, 140-0002 JAPAN PHONE: 81-3-5462-4267
SUPPLIER: SUMITOMO BAKELITE CO., LTD.
TENNOZ PARK SIDE BLDG., 5-8, HIGASHI-SHINAGAWA 2-CHOME,
SHINAGAWA-KU, TOKYO, 140-0002 JAPAN PHONE: 81-3-5462-4267

EMERGENCY ASSISTANCE (Please contact any of manufacture's following sales offices)

NAME & EMERGENCY PHONE NUMBER	ADDRESS
SUMITOMO PLASTICS AMERICA, INC. PHONE: 408-243-8402 (USA)	900 Lafayette Street Suite#510 Santa Clara, CA 95050
SUMITOMO BAKELITE SINGAPORE PTE.LTD. PHONE: 6755-5550 (SINGAPORE)	1 Senoko South Road Singapore 758069
n.v. SUMITOMO BAKELITE EUROPE s.a. PHONE: 02-709-2139 (BELGIUM)	Regus Pegasus Park Pegasuslaan 5 1831 Diegem, Belgium
SUMITOMO BAKELITE (SUZHOU) CO., LTD. PHONE: 0512-67613850 (CHINA)	140 Jinjihu Road, China-Singapore Suzhou Industrial Park, Suzhou, China, 215021
SUMITOMO BAKELITE (TAIWAN) CO., LTD. PHONE: 07-787-1285 (TAIWAN)	No.1 Hwa Syi Road, Ta Fa Industrial District, Ta Liao, Kaohsiung, Taiwan
CHEMTREC PHONE: 800-424-9300 (USA) 24 hours EVERYDAY	

2. HAZARDS IDENTIFICATION

GHS-Classification :

Skin corrosion/irritation	Category3
Serious eye damage/eye irritation	Category2B
Sensitisation – respiratory	Category1
Sensitisation – skin	Category1
Carcinogenicity	Category1
Hazardous to the aquatic environment – acute toxicity	Category2
Hazardous to the aquatic environment – chronic toxicity	Category2

GHS-Labeling



Danger

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Hazard Statement :

Causes mild skin irritation
Causes serious eye irritation
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
May cause cancer
Toxic to aquatic life
Toxic to aquatic life with long lasting effects

Precaution Statement :

Use only in well-ventilated area
Avoid breathing dust/fume/gas/mist/vapours/spray
Avoid contact skin
Wear protective gloves/protective clothing/eye protection/face protection.
Wash ... thoroughly after handling

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

COMPONENTS	(CAS NO.)	BY WEIGHT (%)
Epoxy Resin A	(Trade Secret)	1 - 5
Epoxy Resin B	(Trade Secret)	0.5- 2.5
Phenol Resin	(Trade Secret)	1 - 5
Metal Hydroxide	(Trade Secret)	1 - 3
Carbon black	(1333-86-4)	0.1 - 0.5
Silica fused	(60676-86-0)	60 - 80
Silica fused	(7631-86-9)	10 - 20
Silica, crystalline *	(14808-60-7)	0.1 - 0.5

*:Remaining as impurity of Silica fused(Cas No.60676-86-0)

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4. FIRST AID MEASURES

- EYE CONTACT : Flush affected eyes with large amount of water, also under the eyelids for at least 15 minutes. Get medical attention.
- SKIN CONTACT : Wash immediately with plenty of water or shower with soap.
If irritation occurs, get medical attention.
- INGESTION : Immediately give plenty of water. Get medical attention.
- INHALATION : Remove to fresh air in case of accidental inhalation of vapors or dusts.
Get medical attention.
- SPECIAL NOTE TO PHYSICIANS
: Treat Symptomatically.
Treatment may vary with condition of victim and specifics of incident.

5. FIRE FIGHTING MEASURES

- Extinguishing media : Suitable for water, foam, carbon dioxide or dry chemicals.
- Specific hazards : Combustion gas contains carbon mono oxide.
- Specific methods : Wear protective equipment. Evacuate the people from leeward side, and extinguish the fire from windward.
- Protection of firefighters : Wear full bunker gear including positive self-contained breathing apparatus in any closed space.

6. ACCIDENTAL RELEASE MEASURES

- PERSONAL PRECAUTION : Use personal protective equipments. Avoid dust formation.
- ENVIRONMENTAL PRECAUTIONS : Do not flush into surface water or sanitary sewer system.
- METHODS FOR CLEANING UP : Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

- HANDLING : Avoid contact with eyes and skin, and avoid breathing dust or vapors. Provide appropriate exhaust ventilation at places where dust is formed.
- STORAGE : Keep containers tightly closed in a cool, well-ventilated space.
Keep dry and cool below 5 °C for quality.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:

COMPONENTS	EXPOSURE GUIDELINES (mg/m ³)	
	ACGIH (TLV-TWA)	OSHA (PEL)
Silica Fused	0.1 (Respirable)	80
Silica, crystalline, quartz	0.1 (Respirable)	10 (Respirable), 30 (Total)
Epoxy Resin A	Not listed	Not listed
Epoxy Resin B	Not listed	Not listed
Phenol Resin	Not listed	Not listed
Metal Hydroxide	Not listed	Not listed
Carbon Black	3.5	3.5

ENGINEERING MEASURES:

Ensure adequate ventilation, especially in confined areas.

PERSONAL PROTECTIVE EQUIPMENTS:

Respiratory protection - For most conditions, no respiratory protection should be needed; however, in dusty atmospheres or insufficient ventilation, wear a suitable respiratory equipment or NIOSH//OSHA approved respirator to protect from dust.

Hand protection - Impervious gloves (chemical-resistant gloves).

Eye protection - Safety glasses with side shields.

Skin and body protection - Chemical-resistant apron.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Black tablet
Odour	: Slight antiseptic odor
Odour threshold	: None
pH	: Not applicable
Melting point/freezing point	: (Softening point) 75°C - 95°C
Initial boiling point and boiling range	: None
Flash point	: None
Evaporation rate	: Not applicable
Flammability(solid,gas)	: Flame retardance
Upper/lower flammability or explosive limits	: Not applicable
Vapor pressure	: Not applicable
Vapor density	: Not applicable
Relative density	: 1.8 - 2.2
Solubility(ies)	: Insoluble in water
Partition coefficient:n-octanol/water	: No information available.
Auto-ignition temperature	: No information available.
Decomposition temperature	: No information available.
Viscosity	: Not applicable

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10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:

Stable under recommended storage condition.

CONDITIONS TO AVOID:

Keep away from heat, moisture and sunlight for quality.

MATERIALS TO AVOID:

Oxidizing agents, acids and alkali.

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon dioxide. Thermal decomposition can lead to release of irritating gases and vapors such as methane, ammonia, Phenol, carbon monoxide and hydrocarbon compounds.

11. TOXICOLOGICAL INFORMATION

No data is available on product itself.

Acute toxic substance: Silica fused: oral-rat LD50: 3,160mg/kg
Epoxy resinA oral-rat LD50: 11 g/kg
Epoxy resinB: oral-rat LD50: >5,000mg/kg

Skin corrosive /Irritating substance: Epoxy resinA

Substance causing serious eye damage or irritation: Silica fused, Epoxy resinA

Respiratory hypersensitive substance: Epoxy resinA

Skin hypersensitive substance: Epoxy resinA, Epoxy resinB

Carcinogenic substance: Silica fused: Group 3

Carbon black: Group 2B

Silica, crystalline * Group 1A

*:Remaining as impurity of Silica fused

Germ cell mutagenic substance: Not applicable

Reproduction toxic substance: Not applicable

Specific target organ/systemic toxicity substance (onetime exposure): Not applicable

Specific target organ/systemic toxicity substance (repeated exposure): Not applicable

Aquatic environment hazard substance: Epoxy resinA

12. ECOLOGICAL INFORMATION

Aquatic/terrestrial ecology toxicity:

Waste water from subsequent processing should be given appropriate treatment in line with local regulations.

Residual and degradability: No data is available on product itself.

Biological concentration: No data is available on product itself.

Soil mobility: No data is available on product itself.

Other hazardous effects: No data is available on product itself.

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13. DISPOSAL INFORMATION

WASTE FROM RESIDUES:

Can burn in a chemical incinerator equipped with an afterburner and scrubber in compliance with government or local disposal regulations, also contaminated packaging do so.

14. TRANSPORT INFORMATION

U.N. number: None assigned.
U.N. proper shipping name: Not applicable
Transportation danger classes: None assigned
Container classes: None assigned
Marine contamination substance: No data is available on product itself.
Whether the user needs to know about the to transportation or transportation method or special safety measures : Transport under 5 °C or below for quality. Avoid leak, spilling and collapse of cargo.

15. REGULATORY INFORMATION

Applicable regulations:

<Ref> Each substance
Standards on Workplace Atmosphere of Dangerous and Hazardous Materials
Carbon Black TSCA (TOXIC SUBSTANCES CONTROL ACT):

16. OTHER INFORMATION

Reference document: ACGIH (2006)
OSHA (USA CFR 29, 2006)
IARC (Vol. 1 ~ 88)
NTP (11th)
RTECS (2006, Internet)
International Chemical Safety Cards (ICSCs)
Supplier's Material Safety Data Sheet

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