

SAFETY DATA SHEET

PRODUCT NAME: EME-7351
Type LS
MSDS NO.: MSDS-EME-521
DATE PREPARED: Dec.15,2006 according to 2001/58/EC

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: EME-7351
Type LS

CHEMICAL NATURE: EPOXY MOLDING COMPOUND

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
SUMITOMO BAKELITE EUROPE (BARCELONA), S.L. PHONE: 093-579-9050 (SPAIN)	Antonio Machado 2-4, 08170 Monternes del Valles Barcelona
n.v. SUMITOMO BAKELITE EUROPE s.a. PHONE: 089-320-304 (BELGIUM)	Henry Ford Laan 80 3600 Genk
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. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS	(CAS NO.)	BY WEIGHT (%)
Silica Fused	(60676-86-0)	80 - 95
Epoxy Resin	(Trade secret)	3 - 8
Phenol Resin	(Trade secret)	3 - 8
Antimony Trioxide	(1309-64-4)	0.1 - 0.7
Brominated Epoxy Resin	(68541-56-0)	0.1 - 1.0
Carbon Black	(1333-86-4)	0.1 - 0.5

Labeling according to EC directives

Hazardous components: Epoxy Resin ($\geq 1\%$)
EINECS No.: 413-900-7
Hazardous symbol: Xn (Harmful), Risk phrase: 68

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3. HAZARDS IDENTIFICATION

--- EMERGENCY OVERVIEW ---

Black pellet with slight antiseptic odor. Prolonged exposure may cause skin irritation. Self extinguishing and not ordinarily an emergency problem. Epoxy Resin is a substrate known to be positive by Ames test. Water, foam, carbon dioxide and dry chemicals can be used on fire.

POTENTIAL HEALTH EFFECTS:

- EYE : Solid or dusts may cause irritation or corneal injury due to mechanical action.
- SKIN : Prolonged exposure may cause skin irritation. A single, Prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.
- INGESTION : Small amounts swallowed during normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury.
- INHALATION : May occur rhinitis, allergic dermatitis (Sb_2O_3) and may cause bronchitis (SiO_2).

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.

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.
- FIRE FIGHTING EQUIPMENT : Wear full bunker gear including a positive pressure 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.

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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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:

COMPONENTS	EXPOSURE GUIDELINES (mg/m ³)	
	ACGIH (TLV-TWA)	OSHA (PEL)
Silica Fused	0.1 (Respirable)	80
Epoxy Resin	Not listed	Not listed
Phenol Resin	Not listed	Not listed
Antimony Trioxide	0.5 (as Sb)	0.5 (as Sb)
Brominated Epoxy Resin	Not listed	Not listed
Carbon Black	3.5	3.5

ENGINEERING MEASURES:

Ensure adequate ventilation, especially in confirmed 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 pellet with slight antiseptic odor.
PH : Not applicable
BOILING POINT : Not applicable
DECOMPOSITION : (Softening point) 75°C - 95°C
TEMPERATURE
FLASH POINT : None
AUTOIGNITION TEMPERATURE : No information available.
EXPLOSION PROPERTIES : No information available.
VAPOR PRESSURE : Not applicable
VAPOR DENSITY (AIR=1) : Not applicable
SPECIFIC GRAVITY : 1.8 - 2.2
SOLUBILITY IN WATER : Insoluble in water

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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

ACUTE TOXICITY : Silica fused: oral-rat LD50: 3,160 mg/kg
Epoxy resin: oral-rat LD50: >5,000 mg/kg
Antimony trioxide: oral-rat LD50: >34,600 mg/kg

LOCAL EFFECTS : No information available.

SENSITIZATION : No information available.

CHRONIC TOXICITY : Potential carcinogen by IARC;
Silica fused: Group 3
Antimony trioxide: Group 2B
Carbon black: Group 2B

12. ECOLOGICAL INFORMATION

MOBILITY : No data is available on product itself.

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

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

Not a hazardous material for DOT (Department of transportation) shipping.

Not dangerous by any mode of international transport.

UN No.: None assigned.

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15. REGULATORY INFORMATION

TSCA (TOXIC SUBSTANCES CONTROL ACT):

The ingredients of this product are all on the 8(b) inventory list.

EINECS (EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES):

This product complies with the provisions of the European Inventory.

EINECS No.	Silica Fused	262-373-8
	Phenol Resin	Monomers are all on the inventory list.
	Antimony Trioxide	215-175-0
	Brominated Epoxy Resin	Monomers are all on the inventory list.
	Carbon Black	215-609-9
ELINCS No.	Epoxy Resin	Notification No.94030295

Labeling according to EC Directives:

Hazard Symbol: Xn-Harmful
Risk Phrase: R68-Possible risk of irreversible.
Safety Phrase: S2-Keep out of the reach of children.
S22-Do not breath dust.
S36-Wear suitable protective clothing.
S37-Wear suitable protective gloves.

16. OTHER INFORMATION

DISCLAIMER: The information present herein was prepared for your reference to be best of knowledge. It is given in good faith but no warranty expressed or implied is made.

DATA PREPARED BY: SUMITOMO BAKELITE CO., LTD.
QA DEPARTMENT, UTSUNOMIYA PLANT