

SAFETY DATA SHEET

PRODUCT NAME: EME-G770
Type
MSDS NO.: MSDS-EME-674
DATE PREPARED: Jun.26,2006 according to 2001/58/EC

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: EME-G770
Type
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)	75 - 95
Epoxy Resin A	(Trade secret)	1 - 5
Epoxy Resin B	(Trade secret)	1 - 5
Phenol Resin A	(Trade secret)	1 - 5
Phenol Resin B	(Trade secret)	1 - 5
Metal Hydroxide	(Trade secret)	0.5 - 2.5
Carbon Black	(1333-86-4)	0.1 - 0.5

Labeling according to EC directives

Hazardous components: Epoxy Resin A (>=2.5%, <5%)
EINECS No.: 500-033-5
Hazardous symbol: Xi (Irritant), Risk phrase: 43, 52/53

SAFETY DATA SHEET

PRODUCT NAME: EME-G770
Type
MSDS NO.: MSDS-EME-674
DATE PREPARED: Jun.26,2006 according to 2001/58/EC

3. HAZARDS IDENTIFICATION

--- EMERGENCY OVERVIEW ---

Black tablet with slight antiseptic odor. Prolonged exposure may cause skin irritation. Self extinguishing and not ordinarily an emergency problem. Epoxy Resin A 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 cause bronchitis (SiO₂).

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.

SAFETY DATA SHEET

PRODUCT NAME: EME-G770
Type
MSDS NO.: MSDS-EME-674
DATE PREPARED: Jun.26,2006 according to 2001/58/EC

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 A	Not listed	Not listed
Epoxy Resin B	Not listed	Not listed
Phenol Resin A	Not listed	Not listed
Phenol Resin B	Not listed	Not listed
Metal Hydroxide	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 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 with slight antiseptic odor.
pH : Not applicable
BOILING POINT : Not applicable
DECOMPOSITION TEMPERATURE : (Softening point) 75°C - 95°C
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

SAFETY DATA SHEET

PRODUCT NAME: EME-G770
Type
MSDS NO.: MSDS-EME-674
DATE PREPARED: Jun.26,2006 according to 2001/58/EC

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: orl-rat LD50: 3,160 mg/kg
Epoxy resin A: orl-rat LD50: 11 g/kg
Epoxy resin B: orl-rat LD50: >5,000 mg/kg

LOCAL EFFECTS : No information available.

SENSITIZATION : No information available.

CHRONIC TOXICITY : Potential carcinogen by IARC;
Silica fused: Group 3
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.

SAFETY DATA SHEET

PRODUCT NAME: EME-G770
Type
MSDS NO.: MSDS-EME-674
DATE PREPARED: Jun.26,2006 according to 2001/58/EC

15. REGULATORY INFORMATION

TSCA (TOXIC SUBSTANCES CONTROL ACT):

This product can be use sorely for research and development because Phenol Resin B, which is an ingredient of this product, is not registered 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
	Epoxy Resin B	Monomers are all on the inventory list.
	Phenol Resin A	Monomers are all on the inventory list.
	Phenol Resin B	Monomers are all on the inventory list.
	Metal Hydroxide	244-492-7
	Carbon Black	215-609-9
NLP No.	Epoxy Resin A	500-033-5

Labeling according to EC Directives:

Hazard Symbol: Xi-Irritant

Risk Phrase: R43-May cause sensitization by skin contact.

R52/53- Harmful to aquatic organisms, may cause long-term adverse effect in the aquatic environment.

Safety Phrase: none

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 on implied is made.

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