

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name	SUMIKAEXCEL 4800G B
Chemical name	Polyethersulfone
General use	Injection molding material
Manufacturer	Sumitomo Chemical Co., Ltd. ELECTRONIC MATERIALS DIV. 27-1, Shinkawa 2-chome, Chuo-ku, Tokyo 104-8260 Japan TEL +81-3-5543-5845 FAX +81-3-5543-5939
Emergency Contact	Sumitomo Chemical Co., Ltd. ELECTRONIC MATERIALS DIV. TEL +81-3-5543-5845 FAX +81-3-5543-5939

2. COMPOSITION / INFORMATION ON INGREDIENTS

Components	CAS No.	wt. %	OSHA PEL	ACGIH TLV
Polyethersulfone	113569-14-5, 36313-66-3, 25667-42-9	99-100%	N/E	N/E
Carbon black * ¹	1333-86-4	<1%	3.5 mg/m ³	3.5 mg/m ³

(N/E Not Established)

3. HAZARDS IDENTIFICATION

Emergency overview

Black pellet. May be harmful if swallowed in large amounts. Skin contact with molten resin can cause serious burns. Avoid release to the environment.

Potential Health Effects

Inhalation	Not known.
Eye contact	Not known. May cause scratch the surface of eyes.
Skin contact	Not known. Prolonged or repeated contact may cause skin irritation.
Ingestion	May be harmful if swallowed in large amounts.
Chronic/ Carcinogenicity	Not known. Carbon black is listed by IARC as Group 2B(possibly carcinogenic to humans), and not listed by NTP or OSHA as a carcinogen.

4. FIRST AID MEASURES

First aid Procedures

Inhalation	If exposed to excessive levels of gases that may be formed at elevated temperatures, remove to fresh air. Give the
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victim rest. Get immediate medical attention. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Never give anything by mouth to an unconscious person.

Eye contact	Rinse immediately with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Remove contact lenses if easily. Get medical attention if irritation develops or persists.
Skin contact	For hot material, immediately immerse or flush the affected area with large amounts of cold water to dissipate heat. Cover with clean cotton or gauze and get medical attention immediately. Get medical attention if irritation develops or persists.
Ingestion	Immediately induce vomiting and rinse mouth with plenty of water. Get medical attention. Never give anything by mouth and induce vomiting in unconscious or confused persons.
Medical treatment	Symptomatic treatment is advised.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Use carbon dioxide or dry chemical for small fires, universal foam or water spray for large fires.
Hazardous combustion products	May generate CO, SO _x when heated to burning.
Fire-fighting instructions	Wear self-contained breathing apparatus. Dike area to prevent runoff from entering sewer or water sources. Evacuate personnel to a safe area. Keep personnel removed and upwind of fire.
Special protective equipment for fire-fighters	Wear self-contained breathing apparatus. Wear suitable protective clothing. See also Section 8.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	For personal protection (see section 8) when cleaning spill.
Environmental precautions	Avoid runoff into storm sewers and ditches, which lead to waterways.
Methods for cleaning up	In case of spill, vacuum or sweep up material and place in a disposal container immediately. Reduce airborne dust and prevent scattering by moistening with water. Scrub contaminated area with detergent and water. Dispose of

as waste following local regulations.

7. HANDLING AND STORAGE

Handling	Use with adequate personal protections. Avoid contact with eyes and skin. Avoid inhaling gases from heated material. Wash thoroughly after handling. Keep away from all ignition sources. Ground and bond containers when transferring material.
Storage	Store in a cool, well-ventilated place away from sources of heat, sources of ignition and direct sunlight. Keep container tightly closed in a well-ventilated place. Keep only in the original container.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure limits	<p>OSHA PEL (2003)</p> <p>Carbon black 3.5 mg/m³</p> <p>Particles Not Otherwise Specified [PNOS]</p> <p>5 mg/m³ (Respirable fraction)</p> <p>15 mg/m³ (Total dust)</p> <p>ACGIH TLV (2005)</p> <p>Carbon black 3.5 mg/m³</p> <p>Particles Not Otherwise Specified [PNOS]</p> <p>3 mg/m³ (respirable particles)</p> <p>10 mg/m³ (inhalable particles)</p>
Engineering controls	Use local ventilation at places where vapour can be released into the workplace air. Always clean protective equipment and workplace. Keep container tightly closed.
Personal protective equipment	
Respiratory protection	A respirator is recommended for prolonged handling or exposure.
Hand protection	Wear chemical resistant gloves.
Eye protection	Wear safety goggles or equivalent eye protection.
Skin protection	Wear appropriate protective clothing to avoid skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Black pellet
Odor	Odorless
Physical state	Solid
pH	Not applicable.
Boiling point	Not applicable.
Melting point	Not applicable.
Flash point	Not available.
Explosive properties	Not available.
Oxidising properties	Not available.

Vapor pressure	Not available.
Relative density	ca.1.35-1.39
Solubility in water	Insoluble
Solubility in other solvents	Not available.
Partition coefficient (octanol / water)	Not available.
Viscosity	Not available.
Vapor density	Not available.

10. STABILITY AND REACTIVITY

Conditions to avoid	Direct sunlight, source of heat, open flames, sparks and high temperature
Materials to avoid	No information available.
Hazardous decomposition products	May generate CO, SO _x when heated to burning.
Hazardous polymerization	Will not occur.

11. TOXICOLOGICAL INFORMATION

No toxicological data are available on the material as such. The following data are applicable to "Polyethersulfone" listed below.

[Polyethersulfone]	
Acute oral effects	LD ₅₀ >4000 mg/kg (rats)
	LD ₅₀ 1300 mg/kg (mice)

12. ECOLOGICAL INFORMATION

No data available.

13. DISPOSAL CONSIDERATIONS

Waste must be disposed in accordance with federal, state and local environmental control regulations. Empty containers must be handed with care due to material residue.

14. TRANSPORT INFORMATION (not meant to be all-inclusive)

UN Class	Not classified.
UN number	None

15. REGULATORY INFORMATION (not meant to be all-inclusive)

U.S.A	All components are listed on TSCA Inventory.
Europe Union	All components are listed on EINECS.

16. OTHER INFORMATION

MSDS Status

Newly prepared on March/09/2006.

This information only concerns the above-mentioned product and does not need to be valid if used with other(s) or in any process. The information is, to our best present knowledge, correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.

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