

MATERIAL SAFETY DATA SHEET

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SECTION 1 CHEMICAL PRODUCT AND IDENTIFICATION

MANUFACTURER:

SAKAI CHEMICAL INDUSTRY CO., LTD.
32-2-1, Kawasaki, Sabae-city, Fukui, Japan
TELEPHONE 81-0778-62-3705
FACSIMILE 81-0778-62-3706

PRODUCT TRADE NAME:

MINAFOAM (Foamed Polyethylene)

SECTION 2 COMPOSITION, INFORMATION ON INGREDIENTS

CHEMICAL NAME : Polyethylene 99wt% Min.
CAS No. : 9002-88-4 (Polyethylene)
OTHERS : OSHA Hazards Ingredients (29 CFR 1910.1200) : none

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Skin contact of molten polymer causes thermal burn.

POTENTIAL HEALTH EFFECTS:

INHALATION : Inhalation of decomposed polymer gas may cause irritation.
EYE CONTACT : Particles may scratch eye surface or cause mechanical irritation.
Contact with molten polymer causes thermal burn.
SKIN CONTACT : Contact with molten polymer causes thermal burn.
INGESTION : no toxic effect observed
CARCINOGENICITY: Polyethylene is listed by IARC 3.

SECTION 4 FIRST AID MEASURES

INHALATION:

If inhalation of decomposed gas, remove from exposure area to fresh air immediately.
Perform artificial respiration if necessary.
Keep person warm and at rest. Get medical attention immediately.

EYE CONTACT:

Wash eyes immediately with large amounts of water occasionally lifting upper and lower lids, until no evidence of chemical remains (at least 15-20 minutes).
Get medical attention if irritation persists.

SKIN CONTACT:

If molten polymer gets on skin, cool rapidly with cold water.
Do not attempt to peel polymer from skin.
Get immediate medical attention for a thermal burn.

INGESTION:

If vomiting occurs, keep head lower than hips to help prevent aspiration.
Get medical attention if needed.

NOTE TO PHYSICIAN:

Treat symptomatically and supportively.

SECTION 5 FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

FLASH POINT : not applicable

METHOD USED : not applicable

FLAMMABLE LIMITS: LEL: not applicable

UEL: not applicable

Dust-air mixtures may ignite or explode, so dust layers should not be permitted to accumulate in order to avoid any potential for dust explosion hazards.

EXTINGUISHING MEDIA:

Dry chemical, carbon dioxide, water spray or regular foam.

FIRE-FIGHTING EQUIPMENT:

Wear full bunker gear including a positive pressure self-contained breathing apparatus in any closed space.

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

Wear protective equipment; prevent skin contact with molten polymer.

ENVIRONMENTAL PRECAUTIONS:

Prevent the material from reaching sewage system.

METHOD FOR CLEANING/COLLECTING:

Sweep and clean with broom or clothes. At that time, slippage, can cause falls if walked on.

SECTION 7 HANDLING AND STORAGE

HANDLING : In the case of treating molten polymer, use the protective gloves and safety glasses.

Avoid contact with eyes.

Avoid breathing dust.

STORAGE : Store in a dry place away from excessive heat and ignition sources.

SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE GUIDELINES:

Polyethylene polymer: Not established for product as whole

Treat particulate as nuisance particulate:

ACGIH (1995-1996)

TLV-TWA inhalable particulate 10mg/m³

respirable particulate 3mg/m³

OSHA

total dust 8hr. TWA 15mg/m³

respirable fraction 8hr. TWA 5mg/m³

ENGINEERING CONTROLS:

Provide local exhaust ventilation.

Ventilation equipment should be explosion-proof if explosive concentrations of dust, vapor or fume are present.

RESPIRATORY PROTECTION:

For most conditions, no respiratory protection should be needed; however, in dusty atmospheres, use an approved dust respirator.

SKIN PROTECTION:

Protective gloves and long sleeve shirt are required when handling hot polymer.

EYE PROTECTION:

Use safety glasses.

If there is a potential for exposure to particles which could cause mechanical injury to the eye, wear chemical goggles.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES	
APPEARANCE	: white or colored foam sheet
ODOR	: none
MELTING POINT	: 100–135°C (212–275° F)
BOILING POINT	: not applicable
VAPOR PRESSURE	: not applicable
VAPOR DENSITY	: not applicable
SOLUBILITY IN WATER	: insoluble
SPECIFIC GRAVITY	: 0.025–0.030
AUTOIGNITION TEMPERATURE:	400°C (752° F) (Average particle size; 24µm) 440°C (824° F) (Average particle size; 106µm)
DUST EXPLOSIVENESS	: May form flammable or explosive dust-air mixtures.
	LOWEST EXPLOSIVE CONCENTRATION 15g/m ³ (Average particle size; 24µm) 30g/m ³ (Average particle size; 106µm)
SECTION 10 STABILITY AND REACTIVITY	
CHEMICAL STABILITY: Stable under recommended conditions of storage and handling.	
DECOMPOSITION: Hazardous gases/vapors produced are formaldehyde and acrolein and CO.	
CONDITIONS TO AVOID: Avoid contact with strong oxidizers, excessive heat, sparks, or open flame.	
INCOMPATIBILITIES: Strong oxidizing agents	
HAZARDOUS POLYMERIZATION: Hazardous polymerization has not been reported to occur under normal temperatures and pressures.	
SECTION 11 TOXICOLOGICAL INFORMATION	
ACUTE TOXICITY: Rats which were fed 7.95g/kg showed no toxic reactions and gained weight normally.	
CARCINOGEN STATUS: Polyethylene: Animal Inadequate Evidence (IARC Group-3)	
SECTION 12 ECOLOGICAL INFORMATION	
no data available Never dump or discharge this substance into ocean or any other body of water, to avoid ingestion by marine life or birds.	
SECTION 13 DISPOSAL CONSIDERATIONS	
WASTE DISPOSAL: Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local law and regulations.	
SECTION 14 TRANSPORT INFORMATION	
D. O. T. SHIPPING NAME : none D. O. T. HAZARD CLASS : none D. O. T. LABEL : none	

SECTION 15 REGULATORY INFORMATION

OSHA STATUS: Not hazardous by definition of Hazard Communication Standards(29 CFR 1900.1200).

TSCA STATUS: on TSCA INVENTORY

CERCLA REORTABLE QUANTITY (40CFR117, 302): none

SARA TITLE III

SECTION 302(40CFR355 EXTREMELY HAZARDOUS SUBSTANCES)	: none
SECTION 311, 312(40CFR370 HAZARD CATEGORY)	: none hazardous
SECTION 313(40CFR372 TOXIC CHEMICALS)	: none

SECTION 16 OTHER INFORMATION

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