

**MATERIAL SAFETY DATA SHEET**

MSDS Nr.: 6-001

Issue Date: 1/24/13

1. Product and Company Identification

Product Name:	HM1960 EPC - Glass Fabric Epoxy Resin Prepreg
Recommended Use of Product:	Base material fire retardent prepreg, insulation, vinyl floor board, common and specialty industry composites
Manufacturer:	Hankuk Fiber Co., LTD 181-1 Youngji-Ri, Bubuk-Myeon, Miryang-Si, Kyungnam, Korea 627-850 Tel: 82-55-359-2434 Fax: 82-55-359-2439
Emergency Phone Number:	82-55-359-2434

2. Hazards Identification

Form:	Solid
OSHA/HCS Status:	This material is considered hazardous by the OSHA Hazard Communications Standard (29 CFR 1910 1200).
Emergency Overview:	When processed, powdery dust may occur leading to the following hazards: Inhalation: May cause central nervous system depression (CNS) and irritation to the respiratory system. Ingestion: May cause central nervous system depression (CNS). Skin: May cause sensitization by skin contact. Eyes: May cause irritation to eyes.
Potential Chronic Health Effects:	Chronic Effects: Contains material that can cause target organ damage. Carcinogenicity: No known significant effects or critical hazards. Mutagenicity: No known significant effects or critical hazards. Teratogenicity: No known significant effects or critical hazards. Developmental Effects: No known significant effects or critical hazards. Fertility Effects: No known significant effects or critical hazards. Target Organs: Contains material which can cause damage to the following organs: kidneys, liver, central nervous system.
Overexposure Signs/Symptoms:	Adverse symptoms may include: Inhalation: Respiratory tract irritation, coughing, headache, fatigue, nausea or vomiting, drowsiness, dizziness, vertigo. Ingestion: Headache, nausea or vomiting, drowsiness, dizziness, vertigo. Skin: Irritation, redness. Eyes: Pain, irritation, watering, redness. Medical Conditions : Pre-existing skin disorders and disorders involving any other target organs mentioned in this MSDS as being at risk may be aggravated by overexposure.

3. Composition/Information on Ingredients

CHEMICAL NAME	Case Number	Content (%)
Glass fiber	65997-17-3	35-65
Tetrabromobisphenol A, bisphenol A, Epichlorohydrin polymer	26265-08-7	35-65

This product has been thermally processed which converts, by reaction, the individual ingredients into a product that now acts as a whole rather than as a mixture of ingredients. No available information on this specific mixture as a whole. The solvent portion has been reduced to less than 1.00% and the resinous/catalyst ingredients have been partially reacted (B-staged) changing their chemistry. The information presented is based on each components' presence at concentrations greater than 1.00%.

4. First-Aid Measures

After Eye Contact:	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids .
After Inhalation:	Move exposed person to fresh air.
After Skin Contact:	No special treatment. Treat symptomatically.

5. Fire-Fighting Measures

Suitable Extinguishing Media:	Use dry chemical, CO2, water spray(fog) or foam (do not use water jet).
Special Hazards:	Decomposition products may include carbon oxides.
Protective Equipment:	Fire fighters should wear NIOSH approved, positive pressure, self-contained breathing apparatus and full protective clothing when appropriate; personnel should maintain a safe distance from the fire area perimeter.

6. Accidental Release Measures

Personal Precautions:	Solid substance; no risk of leakage.
Environmental Protection Measures:	Not Applicable.
Measures for Cleanup:	Not Applicable.

7. Handling and Storage

Handling:	Avoid contact with skin; follow safety precautions related to weight of product.
Storage:	Store material in cool, dry place; 50% relative humidity.

8. Exposure Controls and Personal Protection

Appropriate Engineering Measures and Use:	When processing where dust is generated, use only in adequate ventilation. Use process enclosures, local exhaust ventilation or other controls to keep worker exposure to airborne contaminants below any recommended or statutory limits as well as explosive limits.
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9. Physical & Chemical Properties

Appearance:	Epoxy coated glass fiber
Odor:	No data.
Odor Threshold:	No data.
pH:	No data.
Melting Point/Freezing Point:	No data.
Initial Boiling Point/Boiling Range:	No data.
Flashing Point:	No data.
Evaporation Rate:	No data.
Flammability (solid, gas):	No data.
Upper/Lower Flammability or Explosive Limits:	No data.
Vapor Pressure:	No data.
Solubility:	No data.
Vapor Density:	No data.
Specific Gravity:	No data.
Partition Coefficient (n-octanol/water):	No data.
Auto-Ignition Temperature:	No data.
Decomposition Temperature:	No data.
Viscosity:	No data.
Formula Mass:	No data.

10. Stability and Reactivity

Chemical Stability and Possibility of Hazardous Reactions:	Stable under normal temperature and pressure conditions.
Conditions to Avoid (e.g. static discharge, shock or vibration, etc):	Heat, sparks and open flame ignition sources.
Incompatible Materials:	Possibility of erosion by acid.
Hazardous Decomposition Products:	In the event of a fire, small quantities of gas can be released.

11. Toxicological Information

No data available on this specific mixture

GLASS FIBERS

NIOSH RTECS No:	LK3651000
Acute Effects of Overexposure:	Exposure to dust may cause irritation to the skin, eyes and respiratory system.
Chronic Effects of Overexposure:	Prolonged contact with the skin may cause dermatitis; tumors have been detected in experimental animals but have not been detected in humans.
Target Organs:	Respiratory organs, eyes and skin.
Carcinogenicity:	AGIH A4, IARC Group 3
Toxicity Data:	LD50 data not available in source utilized.

BROMINATED EPOXY RESIN

NIOSH RTECS No:	Not listed.
Acute Effects of Overexposure:	Repeated exposure may lead to skin sensitization.
Target Organs:	Skin.
Carcinogenicity:	Not listed by IARC,ACGIH, NTP,OSHA or NIOSH.

12. Ecological Information

No data available on this specific mixture

Environmental Effects: No known significant effects or critical hazards.

13. Disposal Considerations

Disposal Instructions: Dispose of material in accordance with federal, state and local regulations.

14. Transportation Information

Land Transport (DOT):	Not regulated.
Maritime Transport (IMDG):	Not regulated.
Air Transport (IATA):	Not regulated.
ICAO:	Not regulated.
RID/ADR:	Not regulated.
Canada TDG:	Not regulated.

15. Regulatory Information

All the components of this product are listed on the following: Canadian Domestic Substances List (DSL)
Toxic Substances Control Act Inventory (TSCA)
European Inventory of Existing Chemical Substances (EINECS)

16. Other Information

Hazardous Material Information System (HMIS): Health : 2
Flammability : 1
Reactivity : 0

NOTE: This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.