

SAFETY DATA SHEET

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: LyPore[®] Series Microglass Filtration Media with Epoxy Binder (All grades are listed at the end of the MSDS)

Manufacturer: Lydall - Rochester
 P.O. Box 1960
 Rochester, NH 03866
 Telephone Number: 1-603-332-4600/4605
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Product Use: Liquid Filtration Applications

Date of Last Revision: November 30, 2009

SECTION 2 HAZARDS IDENTIFICATION

White, bonded fibrous glass web, odorless.

Emergency Overview: Warning! May form combustible dust concentrations in air during processing. Product dust may be irritating to eyes, skin and respiratory system. Prolonged inhalation of respirable glass wool fibers is suspected to cause cancer.

US OSHA Hazard Classification: Manufactured Article (Dust generated from processing - Hazardous (carcinogen, irritant, exposure limit)

EU Preparation Classification (1999/45/EC): Manufactured Article (Dust generated from processing – Carc Cat 3, Xi, R38, R40

Refer to Section 16 for Full Text of EU Classes and R Phrases

SECTION 3 COMPOSITION INFORMATION ON INGREDIENTS

Ingredient	CAS No./EINECS No.	Percent	EC Substance Classification (67/548/EEC)
Chopped continuous strand fiberglass (> 5 microns in diameter)	65997-17-3 / 266-046-0	0-80%	Not classified as dangerous
Special Purpose Glass Fiber Respirable Size	65997-17-3 / 266-046-0	5-95%	Carc Cat 3, Xi, R38, R40
Polymer Fiber and Binder	Proprietary	2-25%	Not classified as dangerous

Refer to Section 16 for Full Text of EU Classes and R Phrases

SECTION 4 FIRST AID MEASURES

Eye Contact: Do not rub your eyes. Dust particles may cause abrasive eye injury. Flush eyes with water, holding the eyelids apart for several minutes. Get medical attention if irritation persists.

Skin Contact: Do not rub or scratch. Rinse exposed skin with cold water then wash skin with soap and water. Do not use hot water as that opens skin pores and may increase fiber penetration and irritation. Remove contaminated clothing and launder before re-use. Get medical attention if irritation persists.

Ingestion: If small quantities are swallowed, rinse out mouth with water. Drink plenty of water to help reduce irritation. If large amounts are swallowed or if irritation or discomfort occurs, get medical attention.

Inhalation: Remove victim to fresh air. Drink water to clear throat and blow nose to remove dust. Get medical attention if irritation persists.

SECTION 5 FIRE FIGHTING PROCEDURES

Extinguishing Media: Use water, water fog, carbon dioxide, foam or dry chemical.

Firefighting Procedures: Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus for all fires involving chemical products.

Unusual Fire/Explosion Hazards: This product is not classified as flammable or combustible. Dust generated in cutting or other processing of this material may present a potential fire and explosion hazard if suspended in air at high concentrations. Settled dust presents a fire hazard. Resuspension of the dust into the air by vibration, traffic, material handling, etc. in high concentrations in the presence of an ignition source could result in a dust explosion. Minimize the generation and accumulation of dust.

Hazardous Products of Combustion: Combustion of polymer fibers and binder will generate oxides of carbon, fluorine, hydrogen fluoride, chlorine, hydrogen chloride and various hydrocarbons.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Wear appropriate protective clothing and equipment (see section 8). Pick up material and place into a container for disposal. If dust is present, wet down and collect in a manner to minimize the generation of airborne dusts or vacuum with a high efficiency vacuum cleaner. If a vacuum is used, explosion proof equipment is required. Nonsparking tools should be used. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentrations. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air.).

Personal Precautions: Avoid contact with skin, eyes or clothing.

Environmental Precautions: None known.

SECTION 7 HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid creating and breathing dusts. Wear protective clothing and equipment as described in Section 8. Use only with adequate ventilation. Do not eat, drink or smoke when using this material. Launder contaminated clothing before re-use. Wash thoroughly with soap and water after handling. Minimize the generation and accumulation of dust. Keep dust away from open flames, hot surfaces and sources of ignition. Follow good housekeeping practices to keep surfaces, including areas overhead such as piping, drop ceilings, ductwork, etc. free from settled dust. Dry powders can build static electricity charges when subjected to friction of transfer and in mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.

Empty containers retain product residues and can be hazardous. Follow all MSDS precautions when handling empty containers.

Storage: Store in a dry, well ventilated area.

SECTION 8 EXPOSURE CONTROL/PERSONAL PROTECTION

Occupational Exposure Limits:

Chopped continuous strand fiberglass (> 5 microns in diameter)	5 mg/m ³ (respirable) 15 mg/m ³ (total dust) TWA OSHA PEL, 1 f/cc TWA OSHA HSPP* 5 mg/m ³ inhalable or 1 f/cc TWA ACGIH TLV 5 mg/m ³ or 2 fibre/mL TWA UK OEL 1 fibre.cm-3 VME France 0.25 respirable fibers/mL Germany
Special Purpose Glass Fiber Respirable Size	5 mg/m ³ (respirable) 15 mg/m ³ (total dust) TWA OSHA PEL, 1 f/cc TWA OSHA HSPP* 1 f/cc TWA ACGIH TLV 5 mg/m ³ or 2 fibre/mL TWA UK OEL 1 fibre.cm-3 VME France 0.25 respirable fibers/mL Germany
Polymer Fiber and Binder (as particulates not otherwise classified)	5 mg/m ³ (respirable) 15 mg/m ³ (total dust) TWA OSHA PEL

* HSPP = OSHA voluntary Health and Safety Partnership Program

Note: If not listed above, refer to local regulations for specific country exposure limits

Engineering Controls: Use with adequate local exhaust ventilation to minimize exposures. Provide local exhaust ventilation where product is cut or processed in a manner that generates dust. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust handling systems (such as exhaust ducts, dust collectors, vessels and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e. there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

Personal Protective Equipment:

Eye Protection: Wear safety glasses with side shields or dust proof goggles.

Skin Protection: Wear protective gloves to minimize skin contact. Barrier creams may be useful in reducing irritation.

Respiratory Protection: If the occupational exposure limits are exceeded or irritation is experienced, wear an approved particulate respirator. Selection of respiratory protection depends on the contaminant type, form and concentration. Select and use in accordance with all applicable regulations (in the US follow OSHA 1910.134) and good Industrial Hygiene practice.

Other Protective Clothing or Equipment: Clothing with long sleeves and pants should be worn to avoid skin contact. Washing facilities should be available in the work area. Work clothing should be laundered separately from normal clothing.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: White odorless bonded fibrous glass web.

Boiling Point: Not applicable	Melting Point: >700°C (glass fibre)
VOC Content: Not applicable	Specific Gravity: Not available
Solubility in Water: Insoluble	pH: Not applicable
Vapor Pressure (mmHg): Not applicable	Vapor Density: Not applicable
Evaporation Rate: Not applicable	Viscosity: Not applicable
% Volatile by Volume: 0%	Flashpoint: None
Flammable Limits in Air: Not applicable	Autoignition Temperature: Not applicable

SECTION 10 STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: Avoid dust formation.

Incompatibility with Other Materials: Avoid strong acids.

Hazardous Decomposition Products: Thermal decomposition of polymer binder will generate oxides of carbon, fluorine, hydrogen fluoride, chlorine, hydrogen chloride and various hydrocarbons.

Hazardous Polymerization: Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Potential Health Effects:

Eyes: Dust may cause mechanical irritation and possible injury.

Skin: Dust may cause mechanical irritation.

Ingestion: May cause irritation of the mouth and intestinal tract.

Inhalation: Dust may cause nose, throat and upper respiratory tract irritation. Symptoms include coughing, sneezing and scratchy throat.

Chronic Health Effects: Prolonged inhalation of respirable dust from this product may cause adverse effects on the lungs.

Carcinogenicity: Glass wool including special purpose glass fibers (respirable size) are classified by NTP as reasonably anticipated to be a carcinogen. IARC has classified special purpose glass fibers as group 2B, possibly carcinogenic to humans. ACGIH has classified special purpose glass fibers as A3, confirmed animal carcinogen with unknown relevance to humans. Mineral wool (special purpose glass fibres) is classified as a category 3 carcinogen in the EU Dangerous Substances Directive. OSHA has not classified special purpose glass fibers. Continuous filament fiberglass is not classified as a carcinogen by OSHA, IARC, NTP, ACGIH or the EU Dangerous Substances Directive. None of the other components is classified as a carcinogen by IARC, NTP, ACGIH, OSHA or the EU Dangerous Substances Directive.

Medical Conditions Aggravated by Exposure: Individuals with pre-existing skin and respiratory disorders may be at increased risk from exposure.

Acute Toxicity Data: No specific data is available

SECTION 12 ECOLOGICAL INFORMATION

No data available. This material is not expected to be toxic to plants or aquatic organisms.

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose in accordance with national and local regulations.

SECTION 14 TRANSPORT INFORMATION

This material is not regulated as a hazardous material or dangerous good by US DOT, IMDG, IATA/ICAO, ADR/RID or TDG.

SECTION 15 REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

CERCLA: This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA TITLE III:

Hazard Category For Section 311/312: This product is a manufactured article and not subject to reporting.

Section 313 Toxic Chemicals: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

Section 302 Extremely Hazardous Substances (TPQ): None

US Toxic Substances Control Act Inventory (TSCA): This product is an article and not subject to TSCA.

U.S. STATE REGULATIONS

California Proposition 65: This product contains special purpose glass fiber respirable size which is known to the State of California to cause cancer.

INTERNATIONAL REGULATIONS:

EU Labeling: Finished product is an article and no labelling is required.

EU Chemical Inventory (EINECS)/REACH: This product is considered an article under EINECS and REACH.

RoHS (Restriction on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations): This product is RoHS compliant.

Australian Inventory of Chemical Substances: This product is an article and not subject to chemical notification requirements.

China Inventory of Existing Chemicals and Chemical Substances: This product is an article and not subject to chemical notification requirements.

Japanese Existing and New Chemical Substances: This product is an article and not subject to chemical notification requirements.

Korean Existing Chemicals List: This product is an article and not subject to chemical notification requirements.

Philippine Inventory of Chemicals and Chemical Substances: This product is an article and not subject to chemical notification requirements.

Canadian CEPA New Chemical Notification: This product is an article and not subject to new chemical notification.

Canadian WHMIS: If dust is generated in processing this dust would be classified as Class D-2-A (eye, skin and respiratory irritant, carcinogen)

New Zealand: This product is an article and not subject to new chemical notification.

SECTION 16 OTHER INFORMATION

Revision Date: November 30, 2009

Revision Note: Sections 2, 6, 7, 8, 16 (added OSHA recommended Combustible Dust warning information.)

Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and handling of Combustible Particulate Solids, for safe handling.

EU Classes and Risk Phrases for Reference (See Sections 2 and 3):

Carc Cat 3 Carcinogen Category 3

Xi Irritant

R38 Irritating to skin.

R40 Limited evidence of a carcinogenic effect.

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

MSDS List: 9006-X, 9010-X, 9100-F, 9101, 9102, 9103, 9104, 9106, 9106-R, 9107, 9109-1, 9112, 9131, 9251-B, 9410, 9430