SAFETY DATA SHEET

Superfil Epoxy Filler Part B

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

PRODUCT NAME:	**Superfil Epoxy Filler Part B**
PRODUCT NUMBER:	8-EF3B / 8-EF4B
SUPPLIER:	Poly-Fiber, Inc. P.O. Box 3129, Riverside, CA 92519, USA 4343 Fort Drive, Riverside, CA 92509, USA (951) 684-4280 (951) 809-7144 (760) 782-1947
EMERGENCY TELEPHONE:	(800) 424-9300 (Chemtrec- US) (703) 527-3887 (International – Call Collect)

2 - HAZARDS IDENTIFICATION

Irritating to eyes and skin. Harmful: danger of serious damage to health by prolonged exposure through inhalation. Possible risk of harm to the unborn child. Harmful: may cause lung damage if swallowed. Vapors may cause drowsiness and dizziness.
CLASSIFICATION (1999/45) C, N, Xn, Xi

3 – COMPOSITION /INFORMATION ON INGREDIENTS

Name	EC No.	CAS No.	Content %	Classification (67/548/EEC)
Silica	Exempt	12945-52-5	0-10%	This product is not classified according to the EU regulations, S24/25
Tetraethylenepentamine	203-986-2	112-57-2	0-10%	T+, C, R21, R22, R34, R36, R38, R43, R51, R53, S26, S36, S37, S39, S45, S61
Bisphenol A	201-245-8	80-05-7	0-10%	Xi, R36/37/38, R43, S24, S 26, S37, S46
2,4,6-Tri(Dimethylaminoethyl) Phenol	202-013-9	90-72-2	0-10%	Xn,R22,R36,R 38 ,S2, S26, S28

The Full Text for all R-Phrases and S-Phrases is displayed in Section 15

COMPOSITION COMMENTS
The data shown are in accordance with the latest EC Directives

4- FIRST AID MEASURES

INHALATION:
Move the victim to a fresh air place immediately. Get medical attention if discomforts persist.
INGESTION:
Rinse mouth with clean water immediately. DO NOT induce vomiting. Get medical attention immediately. If vomiting occurs, keep the victim's head low so that vomits from the stomach will not enter the lungs.
SKIN CONTACT:
Remove contaminated clothing and flush the affected skin areas with clean water for at least 15 minutes. Get medical attention if discomforts persist.
EYES CONTACT:
Make sure all contact lenses are removed before flushing the eyes with eye lids open with clean water for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

5- FIRE FIGHTING PROCEDURES

EXTINGUISHING MEDIA:
Fire can be extinguished by using Foam, carbon dioxide, or dry powder Dry Chemicals, sand, dolomite, etc…
SPECIAL FIREFIGHTING PROCEDURES:
Do not use a direct stream of water. Product may float and can be re-ignited on the surface of the water. Do not enter a confined area without full bunker gear including a positive-pressure NIOSH-approved self-contained breathing apparatus. Decomposition products may form toxic materials.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Never use welding or cutting torch on or near drum (even empty) because residue or product can ignite explosively. Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by pilot lights, flames and other ignition sources at locations distant from the material handling point. Flammable material.

6-ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:
Wear protective clothing as described in Section 8.
ENVIRONMENTAL PRECAUTIONS:
Spillages or uncontrolled discharges into watercourses must immediately be alerted to Environmental Agency or other appropriate regulatory authority.
SPILL CLEANUP METHODS:
Keep combustibles away from spilled material. Extinguish all ignition sources. Avoid sparks, open flames, and smoking. Ventilate. Absorb in vermiculite, dry sand, or earth and place into containers for disposal.

7-HANDLING AND STORAGE

USAGE PRECAUTIONS:
Keep away from heat, sparks and open flames. Avoid spilling, skin and eyes contact. Use with adequate ventilation and avoid excessive exposure to solvent vapors. Use approved respirator if air contamination exceeds the accepted level.
STORAGE PRECAUTIONS:
FLAMMABLE/Combustible. Keep away from oxidizers, open flames and other ignition sources. Keep unused contents in original container and tightly closed lids. Store in a cool, dry and well-ventilated place and at an ambient Temperature not to exceeding above 120^{o} F.
STORAGE CLASS:
FLAMMABLE liquid storage.

8-EXPOSURE CONTROL/PERSONAL PROTECTION

Name	Workplace Exposure Limits	Remarks
Silica	Not Regulated	Consult local authorities for acceptable exposure limits.
Tetraethylenepentamine	ACGIH TWA 1 ppm SKIN AIHA WEEL TWA 6 mg/m3 1 ppm SKIN AIHA WEEL TWA Aerosol. 5 mg/m3 1 ppm SKIN, D-SEN **(*)**	Same As Above
Bisphenol A	ACGIH, NIOSH, OSHA – Final PELs: none listed	Same As Above
2,4,6-Tri(Dimethylaminoethyl) Phenol	ACGIH, NIOSH, OSHA-Final PELs: none listed	Same As Above

(*) A "skin" notation following the inhalation exposure guideline refers to the potential for dermal absorption of the material including mucous membranes and the eyes either by contact with vapors or by direct skin contact. It is intended to alert the reader that inhalation may not be the only route of exposure and that measures to minimize dermal exposures should be considered. “Skin” notation based upon the possibility that the vapor limit alone may not be protective for pregnant women. There is the potential for absorption of Aminoethylethanolamine from the skin at levels that may seriously affect the fetus.
A “D-SEN” notation following the exposure guideline refers to the potential to produce dermal sensitization, as confirmed by human or animal data.
NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating or inhaling the contents may be harmful or fatal.

PROTECTIVE EQUIPMENTS:




PROCESS CONDITIONS: Provide eyewash station.
ENGINEERING MEASURES: Provide adequate ventilation. Fully equipped spray booth is recommended to ensure the workers legal exposure limits are not exceeded.
RESPIRATORY EQUIPMENT: Wear respirator with appropriate cartridge for organic solvents and chemicals.
HANDPROTECTION: Wear approved gloves such as Neoprene, Nitrile or Rubber types.
EYE PROTECTION: Wear splash-proof goggles.
OTHER PROTECTION: Wear appropriate clothing to prevent any possible skin contact.
HYGIENE MEASURES:

DO NOT SMOKE IN THE WORK AREA. Wash at the end of each work shift and before eating, drinking or smoking. Promptly remove contaminated clothing.

9- PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Paste
COLOR:	White
ODOR:	Aromatic solvents
BOILING POINT:	392^{o}F
RELATIVE DENSITY:	0.590 g/mL
VAPOR DENSITY:	Heavier than air
FLASH POINT:	230^{o}F (Closed Cup)
FLAMMABILITY LIMITS:	N/A
SOLUBILITY VALUE (g/100g H_2O @ 20^{o}C):	Insoluble
VOLATILE ORGANIC COMPOUND (VOC):	0 g/L

10- STABILITY AND REACTIVITY

STABILITY:
Stable
CONDITIONS TO AVOID:
Heat and fires. Ignition sources.
INCOMPATIBILITY (MATERIALS TO AVOID):
Strong alkalines or strong oxidizers. This material may dissolve some plastics, rubber compounds or coatings.
HAZARDOUS DECOMPOSITION OR BYPRODUCTS:
Burning may produce various phenolic compounds, CO and/or CO2 .
HAZARDOUS POLYMERIZATION:
N/A

11-TOXICOLOGICAL INFORMATION

Silica (CAS#12945-52-5): Acute toxicity (LD50/LC50-values relevant to classification):

Exposition	Value/value range	Species
oral	> 5000 mg/kg	rat (Limit Test)
dermal	> 5000 mg/kg	rabbit (Limit Test)
by inhalation	> 0.139 mg/l/4h	rat (Limit Test)

Primary irritation:

Exposition	Effect	Species/Testsystem
to skin	not irritating	rabbit
to eyes	not irritating	rabbit

Experience with man: By handling the product for many years no damage to health was observed.
Tetraethylenepentamine (CAS#112-57-2): LD50/LC50: Draize test, rabbit, eye: 5 mg Moderate; Draize test, rabbit, eye: 100 mg/24H Moderate; Draize test, rabbit, skin: 5 mg/24H Severe; Oral, rat: LD50 = 3990 mg/kg; Skin, rabbit: LD50 = 660 uL/kg;
Carcinogenicity: Not listed by ACGIH, IARC, NTP, or CA Prop 65. Epidemiology: No information available.
Teratogenicity: No information available. Reproductive Effects: No information available. Mutagenicity: Mutation in microorganisms(Salmonella typhimurium)= 333 ug/plate. Neurotoxicity: No information available.
Bisphenol A (CAS#80-05-7) LD50/LC50: Draize test, rabbit, eye: 250 ug/24H Severe; Draize test, rabbit, skin: 500 mg/24H Mild; Oral, mouse: LD50 = 2400 mg/kg; Oral, mouse: LD50 = 2500 mg/kg; Oral, rabbit: LD50 = 2230 mg/kg; Oral, rat: LD50 = 3250 mg/kg; Oral, rat: LD50 = 1200 mg/kg; Skin, rabbit: LD50 = 3 mL/kg; Carcinogenicity: Not listed by ACGIH, IARC, NTP, or CA Prop 65. Epidemiology: No information available. Teratogenicity: Oral, rat: TDLo = 10 gm/kg (female 6-15 day(s) after conception) Effects on Embryo or Fetus - fetotoxicity (except death, e.g., stunted fetus).; Intraperitoneal, rat: TDLo = 1275 mg/kg (female 1-15 day(s) after conception)Specific Developmental Abnormalities - musculoskeletal system).; Intraperitoneal, rat: TDLo = 1275 mg/kg (female 1-15 day(s) after conception) Specific Developmental Abnormalities - Central Nervous System. Reproductive Effects: Oral, rat: TDLo = 15 gm/kg (female 6-15 day(s) after conception)Fertility - post-implantation mortality (e.g. dead and/or resorbed implants per total number of implants).; Intraperitoneal, rat: TDLo = 1875 mg/kg (female 1-15 day(s) after conception) Fertility - litter size (e.g. # fetuses per litter; measured before birth).; Oral, mouse: TDLo = 12500 mg/kg (female 6-15 day(s) after conception) Maternal Effects - uterus, cervix, vagina. Mutagenicity: DNA Damage: Rat, Liver = 200 umol/L.; DNA Adduct: Oral, rat = 800 mg/kg/4D (Continuous).; Micronucleus Test: Hamster, Lung = 200 umol/L. Neurotoxicity: No information available.
2,4,6-Tri(Dimethylaminoethyl) Phenol (CAS#90-72-2) : Acute Health Hazard: LD50/rat/ingestion : 1,673 mg/kg. Inhalation : No data is available LD50/rabbit/skin : 1,242 mg/kg. Eye irritation/corrosion: Severe eye irritation., Corrosive to the eyes of a rabbit. Acute dermal irritation/corrosion: Severe skin irritation., Corrosive to the skin of a rabbit. Sensitization: Dermal sensitization to this product or component has been seen in some humans. The results of a test on guinea pigs showed this substance to be a weak skin sensitizer. Chronic Health Hazard No evidence of mutagenic activity was observed in a bacterial mutation assay. Chromosome Aberration Assay: Negative (Activated and Nonactivated)

12-ECOLOGICAL INFORMATION

Silica (CAS#12945-52-5): Information on elimination (persistence and degradability) Biodegradation / further information: Not applicable.
Further information:
Insoluble in water. **Behavior in environmental compartments: Mobility** -
Further information: No adverse effects expected.
Ecotoxicological effects:

Species	Test method	Exp. Time	Result
Daphnia magna	acute	24 h	> 10000 mg/l (EC50)
zebra fish (Brachydanio rerio)	acute	96 h	> 10000 mg/l (LC50)

No expected damaging effects to aquatic organisms.
Effects in sewage treatment plants (bacteria toxicity: respiration-/reproduction inhibition): According to current knowledge adverse effects on water purification plants are not expected. **Additional information: Other harmful effects:** -
General information: Insoluble in water.
Tetraethylenepentamine (CAS#112-57-2): Ecotoxicity: No data available. No information available. Environmental: If released to soil, tetraethylenepentamine is expected to leach (estimated Koc of 3.6); it will exist primarily as a cation under environmental conditions (pH 5-9) and no experimental data are available which suggest whether the cation will adsorb to soil more strongly than its estimated Koc value indicates. Biodegradation is an important fate process of tetraethylenepentamine in soil or water. If released to water, tetraethylenepentamine may hydrolyze. Physical: No information available.
Bisphenol A (CAS#80-05-7) Ecotoxicity: Fish: Fathead Minnow: LC50 =4.6 mg/L; 96 Hr; Flow-through bioassayWater flea Daphnia: EC50 = 10 mg/L; 48 Hr; Unspecified 4,4'-Isopropylidenediphenol is expected to show moderate to low soil mobility and will biodegrade in soil under aerobic conditions following acclimation. In acclimated water, biodegradaion will be the dominate fate process with a half-life of 4 days. In nonacclimated water, this product may biodegrade after a sufficient adaptation period and may adsorb extensively to suspended solids and sediments or it may photolyze. 4,4'-Isopropylidenediphenol is not expected to bioaccumulate significantly in aquatic organisms, volatilize or undergo chemical hydroylsis from soil or water surfaces. Environmental: In the atmosphere, 4,4'-Isopropylidenediphenol exists primarily in the particulate phase and is removed by dry deposition and photolysis. The small portion that exists in the vapor phase reacts with photochemically produced hydroxyl radicals with a half-life of 4 hours or may photolyze. Physical: No information available.
2,4,6-Tri(Dimethylaminoethyl) Phenol (CAS#90-72-2) : Ecotoxicity effects: Aquatic toxicity: LC50 (24 h) : 222 mg/l Species : Rainbow trout (Oncorhynchus mykiss) LC100 (96 h) : 240 mg/l Species : Rainbow trout (Oncorhynchus mykiss). LC0 (96 h) : 180 mg/l Species : Rainbow trout (Oncorhynchus mykiss). LC50 (24 h) : 249 mg/l Species : Carp (Cyprinus carpio). LC50 (96 h) : 175 mg/l Species : Carp (Cyprinus carpio). EC50 (96 h) : 718 mg/l Species : Grass shrimp (Palaemonetes). EC100 (96 h) : 1,000 mg/l Species : Mud crab (Neopanope). EC0 (96 h) : 750 mg/l Species : Mud crab (Neopanope). EC50 (72 h) : 84 mg/l Species : Scenedesmus subspicatus. Persistence and degradability Biodegradability : According to the results of tests of biodegradability this product is not readily biodegradable. Mobility : No data available. Bioaccumulation : No data is available

13 – DISPOSAL CONSIDERATIONS

Hazardous wastes should be sent to a RCRA approved incinerator or disposed of in a RCRA approved waste facility. Dispose of container and unused contents in accordance with federal, state and local requirements.

14 – TRANSPORT INFORMATION

Product is not regulated for Ground Transport

Product is not regulated for Ocean Transport

Product is not regulated for Air Transport

15-REGULATORY INFORMATION

LABELLING


C


N


Xi and Xn

C = corrosive
N = dangerous for the environment
Xi = irritant
Xn = harmful

R-Phrases:
R21: Harmful in contact with skin
R22: Harmful if swallowed
R34: Causes burns
R36: Irritating to eyes
R36/37/38: Irritating to eyes, respiratory system and skin
R38: Irritating to skin
R43: May cause sensitization by skin contact
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S-Phrases:
S2: Keep out of the reach of children
S24: Avoid contact with skin
S24/25: Avoid contact with skin and eyes
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S28: After contact with skin, wash immediately with plenty of soap and water.
S36: Wear suitable protective clothing
S37: Wear suitable gloves
S39: Wear eye/face protection
S45: In case of accident or if you feel unwell seek medical advice immediately (show label of material or MSDS to Medical Doctor)
S46: If swallowed, seek medical advice immediately and show this container or label
S61: Avoid release to the environment. Refer to special instructions/safety data sheet

16- DISCLAIMER

Above information is based on data supplied to us and is believed to be correct. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since the data made available subsequent to the date hereof may suggest modifications of the information, we do not assume responsibility for the results of its use. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose. It is the user's obligation to determine the safe use of it.