



SAFETY DATA SHEET

TO COMPLY WITH OSHA HAZARD COMMUNICATION STANDARD 29 CFR.1910.1200 & THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifier

Product Form:

Substance Name: PRO GLAS EPOXY HARDENER 2:1 MEDIUM

Product Code(s): 100220506, 100220507, 100220508, 100220509, 100220510, 100220511, 100220513, 100220515

Synonyms:

1.2 Details of the Supplier of the Safety Data Sheet

Fiberlay Inc.

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Sarasota, FL 34234

T 206-782-0660

F 888-782-0662

www.Fiberlay.com

1.3 Emergency Telephone Number

Emergency Number: CHEMTREC: Domestic - 800-424-9300

2. HAZARDS IDENTIFICATION

Physical hazards	Not classified.	
Health hazards	Acute toxicity, oral	Category 4
	Acute toxicity, dermal	Category 3
	Skin corrosion/irritation	Category 1B
	Serious eye damage/eye irritation	Category 1
	Sensitization, skin	Category 1
	Germ cell mutagenicity	Category 2
	Reproductive toxicity	Category 1B
Specific target organ toxicity, repeated exposure	Category 2 (liver, kidney)	
OSHA defined hazards	Not classified.	
Label elements		



Signal word Danger

Hazard statement Harmful if swallowed. Toxic in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Suspected of causing genetic defects. May damage fertility or the unborn child by inhalation. May cause damage to organs (liver, kidney) through prolonged or repeated exposure.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If skin irritation or rash occurs: Get medical advice/attention. Take off immediately all contaminated clothing and wash it before reuse

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/inter local/regional/national/international **regulations.**

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Cas No	% By Weight
Aminoethylpiperazine Compound	Proprietary	60-100
Nonylphenol	Proprietary	60-100
Polyoxypropylenediamine	Proprietary	60-100
Phenol	Proprietary	0.1-1.0

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. The manufacturer has claimed one or more hazardous ingredients as trade secret under the OSHA Hazard Communication Standard. The hazards of this (these) ingredient(s) are given on this SDS.

4. FIRST AID MEASURES

Inhalation Move to fresh air. Oxygen or artificial respiration if needed. Call a physician if symptoms develop or persist.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control center immediately. Chemical burns must be

treated by a physician. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Symptoms/effects, acute and delayed Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed

General information Take off immediately all contaminated clothing. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media Powder. Alcohol resistant foam. Carbon dioxide (CO₂).

Unsuitable extinguishing media Use of water may result in the formation of very toxic aqueous solution.

Specific hazards arising from the chemical Closed containers may rupture violently if heated. Some curing agents when mixed with epoxy resins in large masses can produce vigorous exothermic reactions with considerable heat which may char the reactants, and released fumes and vapors from the thermal decomposition. During fire, hazardous combustion products are released that may include: Carbon oxides (CO_x). Nitrogen Oxides (NO_x). Aldehydes. Ammonia.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting equipment/instructions Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. HANDLING AND STORAGE

Precautions for safe handling Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Provide adequate ventilation. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Pregnant or breastfeeding women must not handle this product. Do not taste or swallow. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Wash hands thoroughly after handling. Wear appropriate personal protective equipment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Phenol (CAS Proprietary)	PEL	19 mg/m ³ 5 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Phenol (CAS Proprietary)	TWA	5 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Phenol (CAS Proprietary)	Ceiling	60 mg/m ³
		15.6 ppm
	TWA	19 mg/m ³
		5 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Phenol (CAS Proprietary)	250 mg/g	Phenol with hydrolysis	Creatinine in urine	*

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

Phenol (CAS Proprietary) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Phenol (CAS Proprietary) Skin designation applies.

US - Tennessee OELs: Skin designation

Phenol (CAS Proprietary) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Phenol (CAS Proprietary) Can be absorbed through the skin.

US. NIOSH: Pocket Guide to Chemical Hazards

Phenol (CAS Proprietary) Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Phenol (CAS Proprietary) Can be absorbed through the skin.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety goggles and a face shield.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Skin protection

Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection

No special requirements under ordinary conditions of use and with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory

equipment. Chemical respirator with organic vapor cartridge and full face piece

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	Liquid.
Form	Clear liquid.
Color	Clear.
Odor	Slight odor.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	399.2 °F (204 °C)

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density 0.97 (H₂O=1)

Solubility(ies)

Solubility (water) Not available.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Explosive properties Not explosive.

Oxidizing properties Not oxidizing.

10. STABILITY AND REACTIVITY

Reactivity

The product is stable and non-reactive under normal conditions of use, storage and

transport.

Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Some curing agents, if mixed with the resin in sufficiently large quantities, can cause exothermic reactions and runaway polymerization, yielding fumes which vary widely in composition and toxicity. Do not breathe fumes.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Alkaline metals. Peroxides. Phenols. Strong acids. Strong oxidizers. Amines.
Hazardous decomposition products	No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation. May cause irritation to the respiratory system.
Skin contact	Toxic in contact with skin. Causes severe skin burns. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns. Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity Toxic in contact with skin. Harmful if swallowed. May cause an allergic skin reaction.

Components	Species	Test Results
Aminoethylpiperazine Compound (CAS Proprietary)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	880 mg/kg
Phenol (CAS Proprietary)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	850 mg/kg, Hours
<i>Oral</i>		
LD50	Rat	317 mg/kg
Skin corrosion/irritation	Causes severe skin burns and eye damage	

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Not a respiratory sensitizer.

Respiratory sensitization

Skin sensitization

May cause an allergic skin reaction.

Germ cell mutagenicity

Suspected of causing genetic defects.

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Phenol (CAS Proprietary)

3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Reproductive toxicity

May damage fertility or the unborn child.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard Not an aspiration hazard.

Chronic effects May cause damage to organs through prolonged or repeated exposure.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Expected to be very toxic to aquatic organisms. May cause long-term adverse effects in the environment.

Components		Species	Test Results
Aminoethylpiperazine Compound			
Aquatic			
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>)	1950 - 2460 mg/l, 96 hours
Phenol			
Aquatic			
Crustacea	EC50	Water flea (<i>Daphnia obtusa</i>)	4.7 - 6.4 mg/l, 48 hours
Fish	LC50	Rainbow trout, Donaldson trout (<i>Oncorhynchus mykiss</i>)	7.5 - 14 mg/l, 96 hours
Polyoxypropylenediamine			
Aquatic			
<i>Chronic</i>			
Algae	NOEC	Algae	0.32 mg/l, 72 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Nonylphenol	5.71
Phenol	1.46

Mobility in soil No data available.

Other adverse affects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component

13. DISPOSAL CONSIDERATIONS

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

DOT

UN number	UN2922
UN proper shipping name	Corrosive liquids, toxic, n.o.s. (Aminoethylpiperazine Compound)
Transport hazard class(es)	
Class	8
Subsidiary risk	6.1(PGI, II)
Label(s)	8, 6.1
Packing group	II
Environmental hazards	
Marine pollutant	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	B3, IB2, T7, TP2
Packaging exceptions	154
Packaging non bulk	202
Packaging bulk	243

IATA

UN number	UN2922
UN proper shipping name	Corrosive liquids, toxic, n.o.s. (Aminoethylpiperazine Compound)
Transport hazard class(es)	
Class	8
Subsidiary risk	6.1(PGI, II)

Label(s) 8, 6.1
Packing group II
Environmental hazards Yes
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number UN2922
UN proper shipping name Corrosive liquids, toxic, n.o.s. (Aminoethylpiperazine Compound)
Transport hazard class(es)
Class 8
Subsidiary risk 6.1(PGI, II)
Label(s) 8, 6.1
Packing group II
Environmental hazards
Marine pollutant Yes
EmS Not available.
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

15. REGULATORY INFORMATION

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
 All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
 Nonylphenol (CAS Proprietary) 1.0 % One-Time Export Notification only.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
 Not regulated.
CERCLA Hazardous Substance List (40 CFR 302.4)
 Phenol (CAS Proprietary) LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
 Delayed Hazard - Yes
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
Phenol	Proprietary	1000		500	10000

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Nonylphenol	Proprietary	60-100

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Phenol (CAS Proprietary)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Aminoethylpiperazine Compound (CAS
Proprietary) Nonylphenol (CAS
Proprietary)
Phenol (CAS Proprietary)

US. New Jersey Worker and Community Right-to-Know Act

Aminoethylpiperazine Compound (CAS
Proprietary) Phenol (CAS Proprietary)

US. Pennsylvania Worker and Community Right-to-Know Law

Aminoethylpiperazine Compound (CAS
Proprietary) Nonylphenol (CAS
Proprietary)
Phenol (CAS Proprietary)

US. Rhode Island RTK

Phenol (CAS Proprietary)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. OTHER INFORMATION

Proglas believes the law requires us to inform you that detectable amounts of any of the listed chemicals might be present in Proglas products. Based on a review of the list, Proglas products, like all synthetic and naturally occurring chemical substances, may conceivably contain trace contaminants of some of the listed substances. While not necessarily added to our products as ingredients, some of the listed chemicals may be present in the raw materials as received from suppliers over which we have no control.

“Warning: This product may contain trace amounts of some chemicals considered by the State of California to be carcinogens or reproductive Toxicants.”

Preparation Date: 1-5-2019

Prepared by: Kevin Aber

Comments: This Safety Data Sheet was prepared using information provided by Proglas

Information in this SDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and Proglas assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his application.

