

# PRO-SET® HTP-182 Resin

## Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Date of issue: 03/19/2018

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### SECTION 1: Identification

#### Identification

**Product form** : Mixture  
**Product name** : PRO-SET® HTP-182 Resin  
**Product code** : HTP-182, HTP-182-1, HTP-182-2, HTP-182-4, HTP-182-5

#### Relevant identified uses of the substance or mixture and uses advised against

**Recommended use** : Infusion resin for composites

#### Details of the supplier of the safety data sheet

##### Supplier

Gougeon Brothers, Inc  
100 Patterson Ave.  
Bay City, MI 48706 - U.S.A.  
T 888-377-6738 or 989-684-7286  
[www.prosetepoxy.com](http://www.prosetepoxy.com)

#### Emergency telephone number

**Emergency number** : CHEMTREC 1 (800) 424-9300  
CHEMTREC International +1 (703) 527-3887 24 hr

### SECTION 2: Hazard(s) identification

#### Classification of the substance or mixture

Skin Irrit. 2  
Eye Irrit. 2A  
Skin Sens. 1  
Aquatic Chronic 2

#### Label elements

##### Hazard pictograms (GHS)



GHS07

GHS09

##### Signal word (GHS)

Warning

##### Hazard statements (GHS)

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.

##### Precautionary statements (GHS)

Avoid breathing dust/fume/gas/mist/vapours/spray. Wash hands, forearms and face thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Collect spillage. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

##### Other hazards

No additional information available

##### Unknown acute toxicity

Not applicable

### SECTION 3: Composition/information on ingredients

#### Substances

Not applicable

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### Mixtures

Name	Product identifier	%
Oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, homopolymer	(CAS-No.) 25085-99-8	80 - 100
Phenol, polymer with formaldehyde, glycidyl ether	(CAS-No.) 28064-14-4	10 - 30
Oxirane, 2,2'-[1,4-butanediylbis(oxyethylene)]bis-	(CAS-No.) 2425-79-8	1 - 5

The exact chemical identity and/or exact percentage (concentration) of each ingredient may be held as confidential business information (CBI). Any ingredient not disclosed in this section may have been determined not to be hazardous to health or the environment, or it may be present at a level below its disclosure threshold. Refer to Section 15 for additional information regarding this CBI claim.

## SECTION 4: First aid measures

### Description of first aid measures

- First-aid measures after inhalation** : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
- First-aid measures after skin contact** : IF ON SKIN: Wash with plenty of Water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact** : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion** : Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

### Most important symptoms and effects, both acute and delayed

- Symptoms/effects after inhalation** : May cause irritation to the respiratory tract.
- Symptoms/effects after skin contact** : Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause an allergic skin reaction.
- Symptoms/effects after eye contact** : Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
- Symptoms/effects after ingestion** : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

### Indication of any immediate medical attention and special treatment needed

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

## SECTION 5: Firefighting measures

### Extinguishing media

- Suitable extinguishing media** : Foam. Carbon dioxide. Dry chemical.
- Unsuitable extinguishing media** : Do not use a heavy water stream.

### Special hazards arising from the substance or mixture

- Fire hazard** : Products of combustion may include, and are not limited to: oxides of carbon. Phenolics. Irritating fumes.
- Reactivity** : No dangerous reactions known under normal conditions of use.

### Advice for firefighters

- Protection during firefighting** : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Cool closed containers exposed to fire with water spray.

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- General measures** : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

### For non-emergency personnel

No additional information available

### For emergency responders

No additional information available

### Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

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### Methods and material for containment and cleaning up

**For containment** : Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.

**Methods for cleaning up** : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

### Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

## SECTION 7: Handling and storage

### Precautions for safe handling

**Precautions for safe handling** : Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Ensure adequate ventilation. When mixed with epoxy curing agents this product causes an exothermic reaction, which in large masses, can produce enough heat to damage or ignite surrounding materials and emit fumes and vapors that vary widely in composition and toxicity.

**Hygiene measures** : Wash contaminated clothing before reuse. Always wash hands after handling the product.

### Conditions for safe storage, including any incompatibilities

**Storage conditions** : Keep out of the reach of children. Keep container tightly closed. Store in dry, cool, well-ventilated area.

**Storage temperature** : 40 - 120 °F / 4 - 49 °C

## SECTION 8: Exposure controls/personal protection

### Control parameters

<b>Oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, homopolymer (25085-99-8)</b>
Not applicable
<b>Phenol, polymer with formaldehyde, glycidyl ether (28064-14-4)</b>
Not applicable
<b>Oxirane, 2,2'-[1,4-butanediylbis(oxymethylene)]bis- (2425-79-8)</b>
Not applicable

### Exposure controls

**Appropriate engineering controls** : Ensure good ventilation of the work station.

**Hand protection** : Wear suitable gloves resistant to chemical penetration.

**Eye protection** : Wear eye/face protection.

**Skin and body protection** : Wear suitable protective clothing.

**Respiratory protection** : In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Environmental exposure controls** : Avoid release to the environment.

**Other information** : Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

**Physical state** : Liquid

**Appearance** : Viscous

**Colour** : Colourless

**Odour** : Mild

**Odour threshold** : No data available

**pH** : No data available

**Melting point** : No data available

**Freezing point** : No data available

**Boiling point** : > 400 °F / 204 °C

**Flash point** : > 200 °F / 93 °C [Based on ASTM D92 test results from similar product]

**Relative evaporation rate (butylacetate=1)** : No data available

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<b>Flammability (solid, gas)</b>	: Not flammable
<b>Vapour pressure</b>	: No data available
<b>Relative vapour density at 20 °C</b>	: Heavier than air. [Estimated based on ingredient data]
<b>Relative density</b>	: 1.16
<b>Solubility</b>	: No data available
<b>Partition coefficient n-octanol/water</b>	: No data available
<b>Auto-ignition temperature</b>	: No data available
<b>Decomposition temperature</b>	: No data available
<b>Viscosity, kinematic</b>	: 7038 mm <sup>2</sup> /s @ 20 °C
<b>Viscosity, dynamic</b>	: No data available
<b>Explosive limits</b>	: No data available
<b>Explosive properties</b>	: No data available
<b>Oxidising properties</b>	: No data available
<b>Other information</b>	
<b>VOC content</b>	: Refer to the hardener SDS for information about the total volatile content of the resin/hardener system
<b>Bulk density</b>	: 9.7 lb/gal / 1.16 kg/L

### SECTION 10: Stability and reactivity

<b>Reactivity</b>	: No dangerous reactions known under normal conditions of use.
<b>Chemical stability</b>	: Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	: No dangerous reactions known under normal conditions of use. A mass of more than one pound of product plus an aliphatic amine will cause irreversible polymerization with significant heat buildup. Strong acids, bases, amines and mercaptans can cause polymerization.
<b>Conditions to avoid</b>	: Heat. Incompatible materials.
<b>Incompatible materials</b>	: Strong acids. Bases. Amines. Mercaptans.
<b>Hazardous decomposition products</b>	: May include, and are not limited to: oxides of carbon. Phenolics.

### SECTION 11: Toxicological information

#### Information on toxicological effects

<b>Oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, homopolymer (25085-99-8)</b>	
LD50 oral rat	> 15000 mg/kg
LD50 dermal rabbit	> 23000 mg/kg

<b>Phenol, polymer with formaldehyde, glycidyl ether (28064-14-4)</b>	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

<b>Oxirane, 2,2'-[1,4-butanediylbis(oxymethylene)]bis- (2425-79-8)</b>	
LD50 oral rat	1134 mg/kg
LD50 dermal rabbit	1130 mg/kg
LC50 inhalation rat	11.3 mg/l/4h

<b>Acute toxicity (oral)</b>	: Not classified.
<b>Acute toxicity (dermal)</b>	: Not classified.
<b>Acute toxicity (inhalation)</b>	: Not classified.
<b>Skin corrosion/irritation</b>	: Causes skin irritation.
<b>Serious eye damage/irritation</b>	: Causes serious eye irritation.
<b>Respiratory or skin sensitization</b>	: May cause an allergic skin reaction.
<b>Germ cell mutagenicity</b>	: Not classified.
<b>Carcinogenicity</b>	: Not classified.
<b>Reproductive toxicity</b>	: Not classified.
<b>STOT-single exposure</b>	: Not classified.
<b>STOT-repeated exposure</b>	: Not classified.
<b>Aspiration hazard</b>	: Not classified.

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PRO-SET® HTP-182 Resin	
Viscosity, kinematic (calculated value) (40 °C)	7038 mm <sup>2</sup> /s @ 20 °C

<b>Symptoms/effects after inhalation</b>	: May cause irritation to the respiratory tract.
<b>Symptoms/effects after skin contact</b>	: Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause an allergic skin reaction.
<b>Symptoms/effects after eye contact</b>	: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
<b>Symptoms/effects after ingestion</b>	: May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
<b>Other information</b>	: Likely routes of exposure: ingestion, inhalation, skin and eye.

### SECTION 12: Ecological information

#### Toxicity

**Ecology - general** : Toxic to aquatic life with long lasting effects.

Ingredient	CAS#	Ecotoxicity Classification Information
Oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, homopolymer	25085-99-8	Aquatic Chronic Cat. 2
Phenol, polymer with formaldehyde, glycidyl ether	28064-14-4	Aquatic Acute Cat. 2; Aquatic Chronic Cat. 2
Oxirane, 2,2'-[1,4-butanediylbis(oxymethylene)]bis-	2425-79-8	Aquatic Acute Cat. 3; Aquatic Chronic Cat. 3

#### Persistence and degradability

PRO-SET® HTP-182 Resin	
Persistence and degradability	Not established.

#### Bioaccumulative potential

PRO-SET® HTP-182 Resin	
Bioaccumulative potential	Not established.

#### Mobility in soil

PRO-SET® HTP-182 Resin	
Ecology - soil	No additional information available.

#### Other adverse effects

**Other information** : No other effects known.

### SECTION 13: Disposal considerations

#### Waste treatment methods

**Product/Packaging disposal recommendations** : Dispose in a safe manner in accordance with local/national regulations.

### SECTION 14: Transport information

#### Department of Transportation (DOT) and Transportation of Dangerous Goods (TDG)

In accordance with DOT/TDG

Not regulated

#### Transport by sea

In accordance with IMDG

UN-No. (IMDG)	: 3082
Proper Shipping Name (IMDG)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name - Addition	: Epoxy resin
Class (IMDG)	: 9 - Miscellaneous dangerous substances and articles
Packing group (IMDG)	: III
EmS-No.	: F-A, S-F
Marine pollutant	: Yes

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### Transport by air

In accordance with IATA

UN-No. (IATA)	: 3082
Proper Shipping Name (IATA)	: Environmentally hazardous substance, liquid, n.o.s.
Proper Shipping Name - Addition	: Epoxy resin
Class (IATA)	: 9 - Miscellaneous Dangerous Goods
Packing group (IATA)	: III
Marine pollutant	: Yes

## SECTION 15: Regulatory information

### Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

<b>Oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, homopolymer (25085-99-8)</b>	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under Chemical Data Reporting Rule (formerly the Inventory Update Reporting Rule), i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 711).
<b>Phenol, polymer with formaldehyde, glycidyl ether (28064-14-4)</b>	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under Chemical Data Reporting Rule (formerly the Inventory Update Reporting Rule), i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 711).
<b>Oxirane, 2,2'-[1,4-butanediylbis(oxymethylene)]bis- (2425-79-8)</b>	
EPA TSCA Regulatory Flag	TP - TP - indicates a substance that is the subject of a proposed Section 4 test rule under TSCA.

Canada WHMIS Confidential Business Information (CBI): No data available

### International regulations

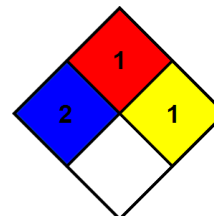
No additional information available

### US State regulations

No additional information available

## SECTION 16: Other information

Date of issue	: 03/19/2018
Revision date	: 05/15/2018
Other information	: None.
NFPA health hazard	: 2
NFPA fire hazard	: 1
NFPA reactivity	: 1



Hazard Rating

Health	: 2 Moderate Hazard
Flammability	: 1 Slight Hazard
Physical	: 1 Slight Hazard

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