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: 06/01/2015 Revision date: 08/18/2016 Version: ADV-176-QC-2016a

SECTION 1: Identification

Identification

Product form : Mixtures

Product name : PRO-SET® ADV-176-QC

Product code : ADV-176-QC, ADV-176-QC-0, ADV-176-QC-2, ADV-176-QC-4

Relevant identified uses of the substance or mixture and uses advised against Recommended use : Adhesive resin for composites

Details of the supplier of the safety data sheet

Manufacturer

Gougeon Brothers, Inc 100 Patterson Ave. Bay City, MI 48706 - U.S.A. T 888-377-6738 or 989-684-7286

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

Signal word (GHS)

Warning

Hazard statements (GHS)

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

Precautionary statements (GHS)

Avoid breathing dust, fume, gas, mist, vapours, spray. Wash hands 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 soap and water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. 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

Substance

Not applicable

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Mixtures

Name	Product identifier	%
Phenol, polymer with formaldehyde, glycidyl ether	(CAS No) 28064-14-4	40 - 70
Oxirane, 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]bis-	(CAS No) 17557-23-2	15 - 25
2-Propenenitrile, polymer with 1,3-butadiene, carboxy-terminated, reaction products with epichlorohydrin-2,2'-methylenebis[phenol] polymer	(CAS No) 68610-73-1	5 - 20
Glass, oxide, chemicals	(CAS No) 65997-17-3	1 - 5
Silica, amorphous, fumed, crystalline-free	(CAS No) 112945-52-5	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

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
- : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. If skin irritation or rash occurs: Get medical
- First-aid measures after eye contact
- : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to
- do, remove contact lenses, if worn. If irritation persists, get medical attention.

advice/attention.

- First-aid measures after ingestion
- : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. 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/injuries after inhalation
- : May cause respiratory tract irritation.
- Symptoms/injuries after skin contact
- : Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause an allergic skin reaction.
- Symptoms/injuries after eye contact
- $: \ \, \text{Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and} \\$
- tear production, with marked redness and swelling of the conjunctiva.

Symptoms/injuries after ingestion

: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS 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.

Reactivity : No dangerous reaction known under conditions of normal 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). Use water spray or fog for cooling exposed containers.

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

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Environmental precautions

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

Methods and material for containment and cleaning up

For containment : Conta

: Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal

Protective Equipment (PPE).

Methods for cleaning up : Scoop up material and place in a disposal container. Provide ventilation.

Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

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. 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 : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in a cool, dry location.

Protect from moisture. Storage temperature: 40°F (4°C) - 120°F (49°C).

SECTION 8: Exposure controls/personal protection

Control parameters

Phenol, polymer w	ith formaldehyde, glycidyl ether (28064-14-4)		
Not applicable			
Oxirane, 2,2'-[(2,2-0	dimethyl-1,3-propanediyl)bis(oxymethylene)]bis- (17557-23	3-2)	
Not applicable			
2-Propenenitrile, polymer with 1,3-butadiene, carboxy-terminated, reaction products with epichlorohydrin-2,2'-methylenebis[phenol] polymer (68610-73-1)			
Not applicable			
Glass, oxide, chemicals (65997-17-3)			
PNOR	Particulate Not Otherwise Regulated (mg/m³)	15 mg/m³ (Total dust) 5 mg/m³ (Respirable)	
Silica, amorphous,	fumed, crystalline-free (112945-52-5)		
ACGIH	ACGIH TWA (mg/m³)	10 mg/m³ (Inhalable) 3 mg/m³ (Respirable)	
OSHA	OSHA PEL (TWA) (mg/m³)	6 mg/m³ (Amorphous silica) 15 mg/m³ (Total dust) 5 mg/m³ (Respirable)	

Exposure controls

Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

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Hand protection : Wear chemically resistant protective gloves.

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.

Environmental exposure controls : Maintain levels below Community environmental protection thresholds.

Other information : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and

safety practices.

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SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties
Physical state : Liquid
Appearance : Gel
Colour : Yellow
Odour : Mild

Odour threshold: No data availablepH: No data availableMelting point: No data availableFreezing point: No data available

Boiling point : > 400 °F (204 °C) (Estimated based on ingredient data)

Flash point : > 200 °F (93 °C) (Based on ASTM D92 test results from similar product)

Relative evaporation rate (butylacetate=1) : No data available
Flammability (solid, gas) : Not flammable
Vapour pressure : No data available

Relative vapour density at 20 °C : < 1 (Estimated based on ingredient data)

Relative density : 1.16

Solubility : No data available Partition coefficient n-octanol/water : No data available **Auto-ignition temperature** No data available **Decomposition temperature** : No data available : No data available Viscosity, kinematic Viscosity, dynamic : No data available : No data available **Explosive limits Explosive properties** : No data available Oxidising properties : No data available

Other information

Bulk density : 9.67 lb/gal (1.16 kg/L)

SECTION 10: Stability and reactivity

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : Stable under normal storage conditions.

Possibility of hazardous reactions : No dangerous reaction known under conditions of normal 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.

Conditions to avoid : Heat. Incompatible materials.

Incompatible materials : Strong acids. Bases. Amines. Mercaptans.

Hazardous decomposition products : May include, and are not limited to: oxides of carbon, phenolics.

SECTION 11: Toxicological information

Information on toxicological effects

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

Oxirane, 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]bis- (17557-23-2)		
LD50 oral rat	4500 mg/kg	
LD50 dermal rabbit	> 2000 mg/kg	

2-Propenenitrile, polymer with 1,3-butadiene, carboxy-terminated, reaction products with epichlorohydrin-2,2'-methylenebis[phenol] polymer (68610-73-1)		
LD50 oral rat	> 2000 mg/kg ATE	
LD50 dermal rabbit > 2000 mg/kg ATE		

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Silica, amorphous, fumed, crystalline-free (112945-52-5)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Acute toxicity (oral): Not classified.Acute toxicity (dermal): Not classified.Acute toxicity (inhalation): Not classified.Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/irritation: Causes serious eye irritation.Respiratory or skin sensitization: May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified.

Carcinogenicity : Not classified.

Silica, amorphous, fumed, crystalline-free (112	2945-52-5)

IARC group 3 - Not classifiable

 Reproductive toxicity
 : Not classified.

 STOT-single exposure
 : Not classified.

 STOT-repeated exposure
 : Not classified.

 Aspiration hazard
 : Not classified.

Symptoms/injuries after inhalation: May cause respiratory tract irritation.

Symptoms/injuries after skin contact : Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking

of the skin. May cause an allergic skin reaction.

Symptoms/injuries 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/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

Toxicity

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

Persistence and degradability

PRO-SET® ADV-176-QC	
Persistence and degradability	Not established.

Bioaccumulative potential

PRO-SET® ADV-176-QC	
Bioaccumulative potential	Not established.

Mobility in soil

PRO-SET® ADV-176-QC	
Ecology - soil	No additional information available.

Other adverse effects

Effect on the global warming : No known effects from this product.

Name	Product identifier	Ecotoxicity Classification Information
Phenol, polymer with formaldehyde, glycidyl ether	(CAS No) 28064-14-4	Aquatic Chronic Cat. 2
Oxirane, 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]bis-	(CAS No) 17557-23-2	Not classified.
2-Propenenitrile, polymer with 1,3-butadiene, carboxy-terminated, reaction products with epichlorohydrin-2,2'-methylenebis[phenol] polymer	(CAS No) 68610-73-1	Aquatic Chronic Cat. 2
Glass, oxide, chemicals	(CAS No) 65997-17-3	Not classified.
Silica, amorphous, fumed, crystalline-free	(CAS No) 112945-52-5	Not classified.

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SECTION 13: Disposal considerations

Waste treatment methods

Product/Packaging disposal recommendations

: This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

SECTION 14: Transport information

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

In accordance with DOT and TDG

Not regulated

Transport by sea

In accordance with IMDG

UN-No. (IMDG) : 3077

Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Epoxy Resin)

Class (IMDG) : 9
Packing group (IMDG) : III
Marine pollutant : Yes

Transport by air

In accordance with IATA

UN-No. (IATA) : 3077

Proper Shipping Name (IATA) : Environmentally hazardous substance, solid, n.o.s. (Epoxy Resin)

Class (IATA) : 9
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).

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.

Phenol, polymer with formaldehyde, glycidyl ether (28064-14-4)				
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C)).			
Oxirane, 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]bis- (17557-23-2)				
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.			
2-Propenenitrile, polymer with 1,3-butadiene, carboxy-terminated, reaction products with epichlorohydrin-2,2'-methylenebis[phenol] polymer (68610-73-1)				
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Rep Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Report CFR 710(C)).			

Epichlorohydrin (106-89-8)				
Listed on the United States SARA Section 302				
Subject to reporting requirements of United States SARA Section 313				
CERCLA RQ	100 lb			
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 lb			
SARA Section 313 - Emission Reporting	0.1 %			

Canada WHMIS Confidential Business Information (CBI): The HMIRA number issued for this CBI claim is #10296. The date of filing is 2016-08-09.

International regulations

No additional information available

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US State regulations

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer, developmental and/or reproductive harm

Epichlorohydrin (106-89-8)						
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)		
Yes	No	No	Yes	9 μg/day		

Epichlorohydrin (106-89-8)

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

U.S. - Pennsylvania - RTK (Right to Know) List

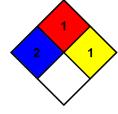
SECTION 16: Other information

 Date of issue
 : 06/01/2015

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 Other information
 : None.

NFPA health hazard : 2
NFPA fire hazard : 1
NFPA reactivity : 1



HMIS III Rating

Health: 2 Moderate HazardFlammability: 1 Slight HazardPhysical: 1 Slight Hazard

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

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