

# PRO-SET® ADV-273-QC HARDENER

## 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: 05/12/2017

Version: ADV-273-QC-2017a

### SECTION 1: Identification

#### Identification

**Product form** : Mixtures  
**Product name** : PRO-SET® ADV-273-QC HARDENER  
**Product code** : ADV-273-QC, ADV-273-QC-0, ADV-273-QC-2, ADV-273-QC-4

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

**Recommended use** : Curing agent for epoxy adhesive resins

#### 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](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

Acute Tox. 4 (Oral)  
Acute Tox. 4 (Inhalation)  
Skin Corr. 1B  
Eye Dam. 1  
Resp. Sens. 1  
Skin Sens. 1  
Muta. 2  
Repr. 2  
STOT SE 3  
STOT RE 2  
Aquatic Acute 2  
Aquatic Chronic 2

#### Label elements

##### Hazard pictograms (GHS)



##### Signal word (GHS)

Danger

##### Hazard statements (GHS)

Harmful if swallowed or if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. Suspected of causing genetic defects. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects

##### Precautionary statements (GHS)

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust, fume, gas, mist, vapours, spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. 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. [In case of inadequate ventilation] wear respiratory protection. 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. If exposed or concerned: Get medical advice/attention. Immediately call a poison center/doctor. If skin irritation or rash

# PRO-SET® ADV-273-QC HARDENER

## Safety Data Sheet

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

occurs: Get medical advice/attention. If experiencing respiratory symptoms: Call a poison center/doctor. Take off contaminated clothing and wash it before reuse. Collect spillage. Store in a well-ventilated place. Keep container tightly closed. Store locked up. 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

No additional information available

## SECTION 3: Composition/information on ingredients

### Substance

Not applicable

### Mixtures

Name	Product identifier	%
Formaldehyde, polymer with N,N'-bis(2-aminoethyl)-1,2-ethanediamine and phenol	(CAS No) 32610-77-8	10 - 40
Benzyl alcohol	(CAS No) 100-51-6	10 - 40
Mercaptan-terminated polymer (Non-hazardous)	(CAS No) Not available	10 - 40
Triethylenetetramine	(CAS No) 112-24-3	1 - 15
Alicyclic aliphatic polyamine	(CAS No) Trade Secret	1 - 10
Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine)	(CAS No) 57214-10-5	1 - 10
Silica, amorphous, fumed, crystalline-free	(CAS No) 112945-52-5	1 - 10
1-Piperazineethanamine	(CAS No) 140-31-8	1 - 10
Phenol	(CAS No) 108-95-2	1 - 10
Diethylenetriamine-bisphenol A-epichlorohydrin polymer	(CAS No) 31326-29-1	1 - 10
Alkyletheramine	(CAS No) Trade Secret	1 - 10
Alkylphenol	(CAS No) Trade Secret	1 - 10
1,3-Benzenedimethanamine	(CAS No) 1477-55-0	1 - 5
Diethylenetriamine	(CAS No) 111-40-0	0.1 - 2

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 inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Immediately call a POISON CENTER or doctor/physician.

#### First-aid measures after skin contact

: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor/physician.

#### 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. Get medical attention immediately.

#### 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. Immediately call a POISON CENTER or doctor/physician.

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

#### Symptoms/injuries after inhalation

: Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.

#### Symptoms/injuries after skin contact

: Causes severe burns. Symptoms may include redness, pain, blisters. May cause an allergic skin reaction.

#### Symptoms/injuries after eye contact

: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.

#### Symptoms/injuries after ingestion

: Harmful if swallowed. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. 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).

# PRO-SET® ADV-273-QC HARDENER

## Safety Data Sheet

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

### 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. Nitrogen oxides. Amines. Ammonia. Nitric acid. Aldehydes. Nitrosamines. When mixed with sawdust, wood chips, or other cellulosic material, spontaneous combustion can occur under certain conditions. Heat is generated as the air oxidizes the amine. If the heat is not dissipated quickly enough, it can ignite the sawdust.

**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

#### 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** : 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). Do not absorb in sawdust, paper, cloth or other combustible absorbents.

**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** : Do not swallow. Handle and open container with care. Use only outdoors or in a well-ventilated area. Do not get in eyes, on skin, or on clothing. Do not breathe dust, fume, gas, mist, vapours, spray. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. When mixed with epoxy resin 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. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace.

#### Conditions for safe storage, including any incompatibilities

**Storage conditions** : Keep locked up and out of reach of children. Keep container tightly closed. Keep only in the original container in a cool, well-ventilated place. Protect from moisture. Storage temperature : 40°F (4°C) - 90°F (32°C).

### SECTION 8: Exposure controls/personal protection

#### Control parameters

**Formaldehyde, polymer with N,N'-bis(2-aminoethyl)-1,2-ethanediamine and phenol (32610-77-8)**

Not applicable

# PRO-SET® ADV-273-QC HARDENER

## Safety Data Sheet

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

<b>Benzyl alcohol (100-51-6)</b>		
AIHA	WEEL TWA (ppm)	10 ppm
<b>Mercaptan-terminated polymer (Non-hazardous) (Trade Secret)</b>		
Not applicable		
<b>Triethylenetetramine (112-24-3)</b>		
AIHA	WEEL TWA (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> (Absorbed via skin)
AIHA	WEEL TWA (ppm)	1 ppm
<b>Alicyclic aliphatic polyamine (Trade Secret)</b>		
Not applicable		
<b>Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine) (57214-10-5)</b>		
Not applicable		
<b>Silica, amorphous, fumed, crystalline-free (112945-52-5)</b>		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (Inhalable) 3 mg/m <sup>3</sup> (Respirable)
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> (Amorphous silica) 15 mg/m <sup>3</sup> (Total dust) 5 mg/m <sup>3</sup> (Respirable)
<b>1-Piperazineethanamine (140-31-8)</b>		
Not applicable		
<b>Phenol (108-95-2)</b>		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	19 mg/m <sup>3</sup>
ACGIH	ACGIH TWA (ppm)	5 ppm
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	19 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	5 ppm
IDLH	US IDLH (ppm)	250 ppm
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	19 mg/m <sup>3</sup>
NIOSH	NIOSH REL (TWA) (ppm)	5 ppm
NIOSH	NIOSH REL (ceiling) (mg/m <sup>3</sup> )	60 mg/m <sup>3</sup>
NIOSH	NIOSH REL (ceiling) (ppm)	15.6 ppm
<b>Diethylenetriamine-bisphenol A-epichlorohydrin polymer (31326-29-1)</b>		
Not applicable		
<b>Alkyletheramine (Trade Secret)</b>		
Not applicable		
<b>Alkylphenol (Trade Secret)</b>		
Not applicable		
<b>1,3-Benzenedimethanamine (1477-55-0)</b>		
ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup>
NIOSH	NIOSH REL (ceiling) (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup>
<b>Diethylenetriamine (111-40-0)</b>		
ACGIH	ACGIH TWA (ppm)	1 ppm

### Exposure controls

#### Appropriate engineering controls

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

#### Hand protection

: Wear chemically resistant protective gloves.

#### Eye protection

: Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield).

# PRO-SET® ADV-273-QC HARDENER

## Safety Data Sheet

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

<b>Skin and body protection</b>	: Wear suitable protective clothing.
<b>Respiratory protection</b>	: 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.
<b>Environmental exposure controls</b>	: Maintain levels below Community environmental protection thresholds.
<b>Other information</b>	: 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.

### SECTION 9: Physical and chemical properties

#### Information on basic physical and chemical properties

<b>Physical state</b>	: Liquid
<b>Appearance</b>	: Gel
<b>Colour</b>	: Blue
<b>Odour</b>	: Ammonia
<b>Odour threshold</b>	: No data available
<b>pH</b>	: 11.2
<b>Melting point</b>	: No data available
<b>Freezing point</b>	: No data available
<b>Boiling point</b>	: > 400 °F (204°C) (estimated based on similar product)
<b>Flash point</b>	: > 200 °F (93°C) (estimated based similar product)
<b>Relative evaporation rate (butylacetate=1)</b>	: No data available
<b>Flammability (solid, gas)</b>	: Not flammable
<b>Vapour pressure</b>	: < 1 mm Hg (estimated based on ingredient data)
<b>Relative vapour density at 20 °C</b>	: No data available
<b>Relative density</b>	: 1.05
<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>	: No data available
<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>	: 8.65 g/l (0.07 lb/gal)
<b>Bulk density</b>	: 8.75 lb/gal (1.05kg/L)

### SECTION 10: Stability and reactivity

<b>Reactivity</b>	: No dangerous reaction known under conditions of normal use.
<b>Chemical stability</b>	: Stable under normal storage conditions.
<b>Possibility of hazardous reactions</b>	: No dangerous reaction known under conditions of normal use. A mass of more than one pound of product plus an epoxy resin will cause irreversible polymerization with significant heat buildup and pressure.
<b>Conditions to avoid</b>	: Heat. Incompatible materials.
<b>Incompatible materials</b>	: Acids. Oxidizing materials. Halogenated compounds.
<b>Hazardous decomposition products</b>	: May include, and are not limited to: oxides of carbon. Nitrogen oxides. Amines. Ammonia. Nitric acid. Aldehydes. Nitrosamines.

### SECTION 11: Toxicological information

#### Information on toxicological effects

<b>Benzyl alcohol (100-51-6)</b>	
LD50 oral rat	1620 mg/kg

# PRO-SET® ADV-273-QC HARDENER

## Safety Data Sheet

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

<b>Benzyl alcohol (100-51-6)</b>	
LC50 inhalation rat	> 4.18 mg/l/4h

<b>Triethylenetetramine (112-24-3)</b>	
LD50 oral rat	1716 mg/kg
LD50 dermal rabbit	1465 mg/kg

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

<b>1-Piperazineethanamine (140-31-8)</b>	
LD50 oral rat	2097 mg/kg
LD50 dermal rabbit	866 mg/kg

<b>Phenol (108-95-2)</b>	
LD50 oral rat	317 mg/kg
LD50 dermal rabbit	630 mg/kg
LC50 inhalation rat	0.9 mg/l/8h

<b>Diethylenetriamine-bisphenol A-epichlorohydrin polymer (31326-29-1)</b>	
LD50 oral rat	1620 mg/kg

<b>1,3-Benzenedimethanamine (1477-55-0)</b>	
LD50 oral rat	980 mg/kg
LD50 dermal rabbit	2000 mg/kg
LC50 inhalation rat	1.34 mg/l/4h

<b>Diethylenetriamine (111-40-0)</b>	
LD50 oral rat	1080 mg/kg
LD50 dermal rabbit	1090 mg/kg
LC50 inhalation rat	0.07 - 0.3 mg/l/4h

<b>Acute toxicity (oral)</b>	: Harmful if swallowed.
<b>Acute toxicity (dermal)</b>	: Not classified.
<b>Acute toxicity (inhalation)</b>	: Harmful if inhaled.
<b>Skin corrosion/irritation</b>	: Causes severe skin burns.
<b>Serious eye damage/irritation</b>	: Causes serious eye damage.
<b>Respiratory or skin sensitization</b>	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
<b>Germ cell mutagenicity</b>	: Suspected of causing genetic defects.
<b>Carcinogenicity</b>	: Not classified.

<b>Silica, amorphous, fumed, crystalline-free (112945-52-5)</b>	
IARC group	3 - Not classifiable

<b>Phenol (108-95-2)</b>	
IARC group	3 - Not classifiable

<b>Reproductive toxicity</b>	: Suspected of damaging fertility or the unborn child.
<b>STOT-single exposure</b>	: May cause respiratory irritation.
<b>STOT-repeated exposure</b>	: May cause damage to organs through prolonged or repeated exposure.
<b>Aspiration hazard</b>	: Not classified.

<b>Potential adverse human health effects and symptoms</b>	: Harmful if inhaled. Harmful if swallowed.
<b>Symptoms/injuries after inhalation</b>	: Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.
<b>Symptoms/injuries after skin contact</b>	: Causes severe burns. Symptoms may include redness, pain, blisters. May cause an allergic skin reaction.
<b>Symptoms/injuries after eye contact</b>	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.

# PRO-SET® ADV-273-QC HARDENER

## Safety Data Sheet

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

<b>Symptoms/injuries after ingestion</b>	: Harmful if swallowed. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. May cause stomach distress, nausea or vomiting.
<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.

<b>Benzyl alcohol (100-51-6)</b>	
LC50 fish 1	460 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	23 mg/l (Exposure time: 48 h - Species: water flea)
LC50 fish 2	10 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

<b>Triethylenetetramine (112-24-3)</b>	
LC50 fish 1	570 mg/l (Exposure time: 96 h - Species: Poecilia reticulata [semi-static])
EC50 Daphnia 1	31.1 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	495 mg/l (Exposure time: 96 h - Species: Pimephales promelas)

<b>1-Piperazineethanamine (140-31-8)</b>	
LC50 fish 1	1950 - 2460 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	32 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	> 1000 mg/l (Exposure time: 96 h - Species: Poecilia reticulata [semi-static])

<b>Phenol (108-95-2)</b>	
LC50 fish 1	11.9 - 50.5 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	4.24 - 10.7 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 fish 2	20.5 - 25.6 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 2	10.2 - 15.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)

<b>Diethylenetriamine (111-40-0)</b>	
LC50 fish 1	248 mg/l (Exposure time: 96 h - Species: Poecilia reticulata [static])
EC50 Daphnia 1	16 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	1014 mg/l (Exposure time: 96 h - Species: Poecilia reticulata [semi-static])

#### Persistence and degradability

<b>PRO-SET® ADV-273-QC HARDENER</b>	
Persistence and degradability	Not established.

#### Bioaccumulative potential

<b>PRO-SET® ADV-273-QC HARDENER</b>	
Bioaccumulative potential	Not established.

<b>Benzyl alcohol (100-51-6)</b>	
Partition coefficient n-octanol/water	1.1

<b>Triethylenetetramine (112-24-3)</b>	
BCF fish 1	(no bioaccumulation expected)
Partition coefficient n-octanol/water	-1.4

<b>1-Piperazineethanamine (140-31-8)</b>	
BCF fish 1	(no bioaccumulation expected)
Partition coefficient n-octanol/water	-1.48

<b>Phenol (108-95-2)</b>	
BCF fish 1	(no significant bioaccumulation)
Partition coefficient n-octanol/water	1.5

<b>Diethylenetriamine (111-40-0)</b>	
BCF fish 1	0.3 - 1.7
Partition coefficient n-octanol/water	-1.3

# PRO-SET® ADV-273-QC HARDENER

## Safety Data Sheet

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

### Mobility in soil

PRO-SET® ADV-273-QC HARDENER	
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
Formaldehyde, polymer with N,N'-bis(2-aminoethyl)-1,2-ethanediamine and phenol	(CAS No) 32610-77-8	Aquatic Chronic Cat. 3
Benzyl alcohol	(CAS No) 100-51-6	No data available
Mercaptan-terminated polymer (Non-hazardous)	(CAS No) Trade Secret	No data available
Triethylenetetramine	(CAS No) 112-24-3	Aquatic Chronic Cat. 3
Alicyclic aliphatic polyamine	(CAS No) Trade Secret	No data available
Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine)	(CAS No) 57214-10-5	Acute Aquatic Cat. 1; Chronic Aquatic Cat. 1
Silica, amorphous, fumed, crystalline-free	(CAS No) 112945-52-5	No data available
1-Piperazineethanamine	(CAS No) 140-31-8	Acute Aquatic Cat. 3; Chronic Aquatic Cat. 3
Phenol	(CAS No) 108-95-2	Acute Aquatic Cat. 3; Chronic Aquatic Cat. 2
Diethylenetriamine-bisphenol A-epichlorohydrin polymer	(CAS No) 31326-29-1	No data available
Alkyletheramine	(CAS No) Trade Secret	No data available
Alkylphenol	(CAS No) Trade Secret	Acute Aquatic Cat. 2; Chronic Aquatic Cat. 2
1,3-Benzenedimethanamine	(CAS No) 1477-55-0	Acute Aquatic Cat. 3; Chronic Aquatic Cat. 3
Diethylenetriamine	(CAS No) 111-40-0	No data available

**Other information** : Avoid release to the environment.

## SECTION 13: Disposal considerations

### Waste treatment methods

**Product/Packaging disposal recommendations** : Avoid release to the environment. 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

UN-No. (DOT/TDG) : UN3259  
Proper Shipping Name (DOT/TDG) : Polyamines, solid, corrosive n.o.s. (Triethylenetetramine)  
Class (DOT/TDG) : 8  
Packing group (DOT/TDG) : III

### Transport by sea

In accordance with IMDG

UN-No. (IMDG) : 3259  
Proper Shipping Name (IMDG) : POLYAMINES, SOLID, CORROSIVE, N.O.S. (Triethylenetetramine)  
Class (IMDG) : 8  
Packing group (IMDG) : III  
EmS Number : F-A, S-B  
Marine pollutant : Yes

### Transport by air

In accordance with IATA

UN-No. (IATA) : 3259  
Proper Shipping Name (IATA) : Polyamines, solid, corrosive, n.o.s. (Triethylenetetramine)  
Class (IATA) : 8  
Packing group (IATA) : III



# PRO-SET® ADV-273-QC HARDENER

## Safety Data Sheet

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

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.

#### Formaldehyde, polymer with N,N'-bis(2-aminoethyl)-1,2-ethanediamine and phenol (32610-77-8)

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)).
--------------------------	---

#### Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine) (57214-10-5)

EPA TSCA Regulatory Flag	P - P - indicates a commenced PMN substance. 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)).
--------------------------	---

#### Phenol (108-95-2)

Listed on the United States SARA Section 302  
Subject to reporting requirements of United States SARA Section 313

CERCLA RQ	1000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 - 10000 lb
SARA Section 313 - Emission Reporting	1 %

#### Diethylenetriamine-bisphenol A-epichlorohydrin polymer (31326-29-1)

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)).
--------------------------	---

Canada WHMIS Confidential Business Information (CBI): The HMIRA number issued for this CBI claim is #11232. The date of filing is 2017-04-26.

#### International regulations

No additional information available

#### US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

#### Benzyl alcohol (100-51-6)

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

#### Triethylenetetramine (112-24-3)

U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

#### 1-Piperazineethanamine (140-31-8)

U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

#### Phenol (108-95-2)

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) List

#### 1,3-Benzenedimethanamine (1477-55-0)

U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

#### Diethylenetriamine (111-40-0)

U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

# PRO-SET® ADV-273-QC HARDENER

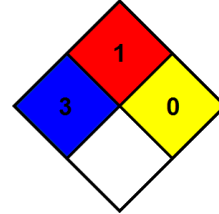
## Safety Data Sheet

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

### SECTION 16: Other information

**Date of issue** : 06/01/2015  
**Revision date** : 09/14/2016  
**Other information** : None.

**NFPA health hazard** : 3  
**NFPA fire hazard** : 1  
**NFPA reactivity** : 0



HMIS III Rating

**Health** : 3 Serious Hazard  
**Flammability** : 1 Slight Hazard  
**Physical** : 0 Minimal 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.*