



Identity (Trade Name As Used On Label)

**SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

ACO Polymer Products  
 Manufacture  
12080 Ravenna Road P.O. Box 245  
 Address  
Chardon, Ohio 44024  
 City, State, Zip  
800-543-4764  
 Phone Number (For Information)  
440-285-7000  
 Emergency Phone Number

ACO Polymer Concrete  
 Trade Name  
Polyester Polymer Concrete  
 Chemical Family  
November 10, 2009  
 Date Prepared  
Auburn Environmental Consultants  
 Prepared By

Note: Blank spaces are not permitted. If any item is found to be not applicable, or no information is available, the space must be marked.

**SECTION 2 – MATERIAL IDENTIFICATION AND INFORMATION**

COMPONENTS – Chemical Name & Common Names (Hazardous Components 1% or greater; Carcinogens 0.1% or greater).	%	CAS #	OSHA PEL (TWA)		ACGIH		NIOSH		UNITS
			TWA	STEL	TWA	STEL	TWA	STEL	
Crystalline Silica (quartz)	44	14808-60-7	$\frac{10 \text{ mg/m}^3}{(\% \text{SiO}_2 + 2)}$	-	0.025	NE	0.05	NE	mg/m <sup>3</sup>
Aggregate	83-92	N/A	ND	ND	ND	ND	ND	ND	-
Unsaturated Polyester Resin	10-18	Proprietary Concentration	NE	NE	NE	NE	-	-	-

NE = Not Established ND= Not Determined

NFPA Rating: Health: 2 Flammability: 0 Reactivity: 0

**SECTION 3 – PHYSICAL / CHEMICAL CHARACTERISTICS**

Boiling Point..... Not Applicable                      Specific Gravity..... Not Applicable  
 Vapor Pressure..... Not Applicable                      Percent Volatile by volume..... Not Applicable  
 Vapor Density..... Not Applicable                      Evaporation Rate..... Not Applicable  
 Solubility in Water..... Not Applicable                      Water Reactive..... Not Applicable  
 p/H..... Not Applicable

As a solid; boiling point, vapor pressure, vapor density, melting point and evaporating rate are not applicable in polymer concrete. Polymer concrete is not soluble in water. It has no distinguishing odor unless it is being sawed or machined, in which case there may be a pungent petroleum type odor as with that in styrene.

**SECTION 4 – FIRE AND EXPLOSION HAZARD DATA**

Flash Point.....Not Applicable  
 Flammable Limits.....Not Applicable  
 Extinguishing Media.....Water, water fog, foam, dry chemical, carbon dioxide (CO2)  
 Special Fire Fighting Procedures..... Material will not burn unless preheated.  
 Unusual Fire or Explosion hazards.....Not Known  
 Note: Personnel exposed to products of combustion are recommended to wear a self-contained breathing apparatus (SCBA) with protective clothing.

## SECTION 5 – REACTIVITY OR INSTABILITY

Stability..... Stable.  
Conditions to Avoid..... Extreme High Temperatures  
Hazardous Polymerization..... Will not occur.  
Incompatibility..... Unknown  
Hazardous Decomposition Products.. Thermal decomposition products are highly dependent on combustion conditions. A complex mixture of airborne solids, liquid, particulates, and gases will evolve if this material undergoes pyrolysis or combustion. Combustion may produce carbon monoxide, carbon dioxide, and irritating or toxic vapors and gases.

## SECTION 6 – HEALTH HAZARD DATA

Routes of Entry..... Inhalation (from dusts)

Health Hazards..... This product contains crystalline silica, which is a hazard by inhalation. This product may produce nuisance dust or respiratory free silica when it is ground or cut with a dry abrasive saw.

### Acute Health Effects:

Inhalation: Excessive exposure to high concentrations of dust may cause irritation to the eyes, skin, and mucous membranes of the upper respiratory tract.

Eyes: Dusts may cause irritation to the eye. Scratching of the cornea can occur if the eye is rubbed.

Ingestion: Ingestion of harmful amounts of this product as distributed is unlikely due to its solid insoluble form. Ingestion of excessive amounts of dust may cause nausea or vomiting.

Chronic: Chronic exposure to respirable crystalline silica may cause silicosis; a fibrosis (scarring) of the lungs. Silicosis may be progressive; it may lead to disability or death. Crystalline silica inhaled from occupational sources is classified as carcinogenic to humans. Reference ACGIG Appendix D and OSHA Table Z-3.

Medical Conditions Generally Aggravated By Exposure: Chronic Obstructive Pulmonary Disease

## SECTION 7 – EMERGENCY AND FIRST AID PROCEDURES

Eyes: In case of eye contact, flush immediately with plenty of water for at least 15 minutes. If irritation or redness persists, consult a physician.

Skin: Wash thoroughly with non abrasive soap and water.

Inhalation: Remove to fresh air immediately and consult a physician as necessary.

Ingested: Ingestion may cause gastrointestinal discomfort. Dilute by drinking large quantities of water. If discomfort persists, consult a physician.

## SECTION 8 – EXPOSURE CONTROL AND PERSONAL PROTECTION

Local Exhaust: Use proper work practices and adequate ventilation with dust collection to maintain airborne levels of crystalline silica to below the permissible exposure levels.

Eye Protection: Use safety glasses, goggles, or face shield (as appropriate) under circumstances where particles could cause injury to the eyes.

Skin Protection: Wear heavy gloves when handling. Good personal hygiene practices should be followed including cleansing of exposed skin with soap and water, and laundering soiled work clothing.

Respiratory

Protection: Use a NIOSH-approved air purifying or supplied-air respirator where airborne concentrations of Crystalline silica (quartz) are expected to exceed exposure limits. Appropriate respiratory protection for respirable crystalline silica is based on the airborne exposure concentration and duration of exposure for the particular use of the respirator. See below:

AIRBORNE CRYSTALLINE SILICA CONCENTRATION	MINIMUM RESPIRATORY PROTECTION
Up to 0.5 mg/m <sup>3</sup>	Any air-purifying respirator with a high efficiency particulate air (HEPA) filter.
Up to 1.25 mg/m <sup>3</sup>	Any powered, air-purifying, full-face piece respirator with a HEPA filter. Any supplied-air respirator operated in a continuous-flow mode.
Up to 2.5 mg/m <sup>3</sup>	Any powered, air-purifying, full-facepiece respirator with a HEPA filter. Any powered, air-purifying respirator with a tight-fitting facepiece and a HEPA filter.
Up to 25 mg/m <sup>3</sup>	Any supplied-air respirator operated in a pressure-demand or other positive-pressure mode.
Emergency or Planned Entry into Unknown Concentrations or Immediately Dangerous to Life or Health Conditions	Up to 500 mg/m <sup>3</sup> . Any self-contained breathing apparatus with a full-facepiece and is operated in pressure-demand mode or other positive pressure mode. Any supplied-air respirator that has a full-facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus.
Escape	Any air-purifying, full-facepiece respirator with a HEPA filter. Any appropriate escape-type, self-contained breathing apparatus.

Only use NIOSH-approved respiratory protection. See 29 CFR 1910.134 and 42 CFR 84. See also ANSI standard Z88.2 (latest revision) "American National Standard for Respiratory Protection".

Other Protective Clothing or Equipment: Heavy gloves for protection against corners and sharp edges when handling.

**SECTION 9 – ENVIRONMENTAL PROTECTION INFORMATION**

Step for Cleanup: Clean up by use of recommended dustless methods such as water or vacuum. Limit exposures that may exceed OSHA PEL.

Waste Disposal Method: Polymer concrete is a non-toxic solid and requires no special procedures. Dispose of by landfill according to local, state, and federal laws and ordinances.

**SECTION 10 – PRECAUTIONS FOR SAFE HANDLING AND USE/LEAK PROCEDURES**

Hygiene Practices in Handling & Storage: Wash hands after use and before eating, drinking, or smoking.

Other Precautions and/or special hazards: Warning to employees that repeated exposure to machined parts could result in injury to the lungs if not protected.

Disclaimer: *The information and recommendations contained herein are offered as a service to our customers but are not intended to relieve the user of his/her responsibility to investigate and understand other pertinent sources of information and to comply with all laws and procedures applicable to the safe handling and use of these products. The information and recommendations provided herein are believed to be generally reliable. However, Auburn Environmental, makes no warranty concerning their accuracy and Auburn Environmental will not be liable for claims relating to any party's use or reliance on information or recommendations contained herein, regardless of whether it is claimed that the information or recommendations are inaccurate, incomplete or otherwise misleading.*