

MATERIAL DATA SAFETY SHEET

Postle Industries, Inc.
P.O. Box 42037 Cleveland, Ohio 44142
Phone: 800-321-2978 Fax: 216-265-9030

SECTION 1 - IDENTIFICATION**MetalTec 9000 Concrete Polymer – Part A, Part B and Part C****SECTION 2 - HAZARDOUS INGREDIENTS**

HARDENER - Part A	CAS Number	OSHA PEL	ACGIH TLV	BASE - Part B	CAS Number	OSHA PEL	ACGIH TLV	
Aliphatic Amines and Epoxy Modifiers	Mixture	N.A.	N.A.	Resin based on Bisphenol A Diglycidyl Ether Polymer Pigments	25068-38-6	N.A.	N.A.	60-90%
HMIS Hazard Rating	H-2	F-1	R-0	HMIS Hazard Rating	H-2	F-1	R-0	10-30%
QUARTZ - Part C	CAS Number	OSHA PEL	ACGIH 8-hr. TWA: 50 micrograms respirable free Silica per cubic meter of air (50Ug/m ³)					
Crystalline Quartz	14808-60-7		OSHA PEL 8-hr. TWA (respirable dust): 0.10 mg/m ³ – See 29 CFR, Part 1910.1000 (Z-3 Table) for mineral dusts, specifically "Silica: Crystalline: Quartz (respirable)".					
Crystalline Quartz (respirable)		10 mg/m ³ % SiO ₂ + 2	The percent of quartz in the formula is the amount determined from an airborne sample. Both concentration and percent quartz for the application of this limit are to be determined from fractions passing a size-selector (10 microns or smaller)					
Quartz (total dust)		30 mg/m ³ % SiO ₂ + 2						
HMIS Hazard Rating	H-4	F-0	R-0					

SECTION 3 - PHYSICAL DATA

HARDENER - Part A	BASE - Part B	QUARTZ – Part C			
Boiling Point	>380°F(173°C)	Boiling Point	>500°F(260°C)	Boiling Point	4046°F(2230°C)
% Volatiles	0.00	% Volatiles	0.00	% Volatiles	0.00
Specific Gravity(Water=1)	N.A.	Specific Gravity(Water=1)	N.A.	Specific Gravity(Water=1)	2.65
Appearance and Odor:	Dark colored liquid	Appearance and Odor:	Gray liquid	Appearance and Odor:	Tan/White

SECTION 4 – FIRE AND EXPLOSION

	HARDENER – Part A	BASE – Part B	QUARTZ – Part C
Flash Point	210°F(99°C) (Closed Cup)	>480°F(249°C) (PMCC)	None
Extinguishing Media	CO ₂ , water spray, dry chemical, foam	CO ₂ , water spray, dry chemical, foam	N.A.
Special Fire Fighting Procedures	Toxic fumes (CO ₂ , CO and NO) will evolve when this material is involved in a fire. Self-contained breathing apparatus should be made available to fire fighters. Keep containers cool.	Toxic fumes (CO ₂ , CO and aldehydes) will evolve when this material is involved in a fire. Self-contained breathing apparatus should be made available to fire fighters. Keep containers cool.	None
Unusual fire & explosion hazards	None	None	None

SECTION 5 - REACTIVITY DATA

	HARDENER – Part A	BASE – Part B	QUARTZ – Part C
Stability	Material is stable.	Material is stable	Material is stable
Incompatibility with Other Substances	Oxidizing materials,	Strong oxidizing agents	Hydrofluoric acid, alkalines, manganese trioxide
Hazardous Decomposition Products	Ammonia, hydrogen cyanide, NO, CO, CO ₂ . Oxygen starved conditions can produce nitriles, amides, carbamates, isocyanates, cyanogens, cyanic acid.	CO, CO ₂ , Aldehydes	None
Hazardous Polymerization	Will not occur	Will not occur	Will not occur
Conditions to avoid	None	High temp., strong acids/bases	None

SECTION 6 – HEALTH HAZARD INFORMATION

HARDENER - Part A	BASE – Part B	QUARTZ – Part C	
Routes of Entry	Skin, eyes, ingestion, inhalation.	Skin, eyes, ingestion, inhalation.	Inhalation
Affects of Overexposure	May cause severe pain and irritation to skin and eyes. Can aggravate skins disorders and allergies. Can result in adverse eye effects (conjunctivitis or corneal damage). Can aggravate chronic respiratory disease (Bronchitis, Emphysema). Ingestion may cause gastrointestinal irritation or ulceration.	May cause irritation to eyes and skin and may aggravate allergies, eczema or other skin conditions. Because of its low toxicity it is unlikely to be an inhalation hazard.	Symptoms are dyspnea – caused by many lung scars that develop from the silica dust – pain in the chest, decrease vital capacity and cough. Chronic lung scarring leads to a progressive massive fibrosis that is often accompanied by increased susceptibility to the risk of impaired health due to a combination of smoking and silica dust exposure.
Skin Absorption	A single prolonged exposure may be harmful. The LD50 for skin absorption in rabbits is 1000 mg/kg.	The LD50 for rabbits is >20 ml/kg.	
Ingestion	Oral LD50 for rats is 620 mg/kg.	The LD50 for rats is 11.4 g/kg (15.6 g/kg mice)	
Other Effects	This material is not considered to be a carcinogenic by NTP, IARC, or OSHA.	This material is not considered to be a carcinogen by NTP, IARC, or OSHA.	Excessive inhalation of dust may result in respiratory disease, including silicosis, pneumoconiosis and pulmonary fibrosis IARC has evaluated in Volume 42 Monographs on the Evaluation of the Carcinogenicity Risk of Chemicals to Humans, Silica and some Silicates (1987), that there is “sufficient evidence for the carcinogenicity crystalline silica in experimental animals” and “limited evidence” with respect to humans.

SECTION 7- FIRST AID

HARDENER - Part A	
Eyes	Immediate and continuous irrigation with flowing water for at least 30 minutes. Call physician.
Skin	Immediately flush skin with water for at least 15 minutes. Get medical attention for burns or if rash develops.
Inhalation	Remove to fresh air and administer oxygen if breathing is difficult.
Ingestion	Call physician immediately. Remove stomach contents by gastric suction or induce vomiting only if directed by medical personnel.

SECTION 8- PREVENTATIVE MEASURES

Spills or Leaks	Part A - Scoop up material and return to containers if not contaminated, otherwise soak up with absorbent. Part B – Scoop up material and return to containers if not contaminated, otherwise soak up with absorbent. Part C – If uncontaminated, collect Spill using dustless method (water or vacuum). If contaminated use appropriate method in consideration of contamination.
Waste Disposal	Part A - Dispose of in accordance with federal, state and local regulations. Incineration is acceptable and the preferred method of disposal. Part B – Not a hazardous waste by RCRA Criteria. Dispose of properly by federal, state and local regulations. Part C – If uncontaminated, dispose of as an inert, non-metallic mineral. If contaminated, use appropriate method in accordance with local, state and federal regulations.
Hand Protection	Chemical resistant gloves.
Eye Protection	Chemical goggles or safety glasses with side shields. Contact lenses should not be worn.
Skin Protection	Wear clothing with long sleeve shirts to cover skin.
Respiratory Protection	Parts A & B - Generally, for Parts A & B, respiratory protection is unnecessary provided there is adequate ventilation. Otherwise, use a cartridge mask, NIOSH approved for organic vapors is recommended. Avoid breathing vapors. Part C – Use conventional particulate respiratory protection based upon considerations of airborne concentrations and duration of exposure. See most recent ANSI, OSHA and MSHA standards-(ANSI Z.88.22) (OSHA 20 CFR Part 1910.134) and (MSHA 30 CFR Part 56).
Ventilation	Use good general mechanical ventilation and local exhaust. Avoid breathing vapors and dusts. Do not permit dust to accumulate.
Handling Precautions	Wear protective clothing including chemical gloves and splash goggles. Wash hands before eating, drinking, smoking or using toilet facilities. Use with adequate ventilation. Mixing part A and B may produce enough heat to cause burns. Warn and train works concerning the hazards of working with crystalline silica. Avoid creation of respirable dust.

Regulatory U.S. Regulations - Reviewed under SARA Sections **Information** 311 & 312 and meets the following categories: **an immediate health hazard**
 SARA Title III – no known toxic chemicals subject to requirements of Sec. 313. Canadian Regulations – WHIMIS designations for this product: D.2.B.