

Safety Data Sheet:

R-E-D Re-Fract 100™

Section 1 – Identification of Product and Company

Tradenames	Re-Fract 100™, ground glass pozzolan.		
Product Uses	Pozzolan for cement, mortar, concrete, stucco, faux stone and related products.		
Supplier	R-E-D Industrial Products	Emergency Phone Number	
	4 Village Park Dr.	Technical Information	(877) 733-2281
	Grove City, PA 16127	Fax Number	(877) 733-2281
	United States	Website	www.redindustrialproducts.com

Section 2 – Hazards Identification

Emergency Overview	Not considered hazardous. Stable and non-flammable under normal industrial conditions.		
Primary Routes of Entry	Inhalation, ingestion, skin absorption.		
Signs and Symptoms of Exposure	Eye, skin, or respiratory tract irritation.		
Acute	Dust may irritate eyes, skin, respiratory tract, mucous membranes. Dust hazard should not occur under normal use.		
Chronic	None Known.		
HMIS and NFPA Hazard Rating	Category	HMIS	NFPA
	Acute Health (0-4)	0/1	0/1
	Flammability (0-4)	0	0
	Reactivity (0-4)	0	0
HMIS Personal Protection	To be supplied by user depending upon use.		
NFPA Unusual Hazards	None.		

Section 3 – Composition / Information on Ingredients

Ingredients	Formula	Composition	OSHA PEL	ACGIH TLV
Silicon Dioxide ¹	SiO ₂	60% to 95%	Not Listed	Not Listed
Alumina	Al ₂ O ₃	0% to 5%		
Iron Oxide	Fe ₂ O ₃	0% to 1%		
Calcium Oxide	CaO	4% to 15%		
Total Alkali	N/A	4% to 15%		

Notes: ¹Exposure to this product may be covered by OSHA inert or nuisance dust limits of 15mg/m³ for total dust and 5mg/m³ for respirable portion. The silicon dioxide is completely amorphous silica and does not contain crystalline silica. Where required, the applicable CAS number is 65997-17-3 for a "Glass Oxide".

Section 4 – First-Aid Measures

Medical Conditions Generally Aggravated by Exposure	May aggravate existing pulmonary condition if high dust situation is created. Dusting conditions should not occur under normal use.
Eye Contact	Immediately flush eyes with water to remove dust particles. If irritation develops, seek medical attention.
Skin Contact	Wash skin with soap and water. If irritation develops, seek medical attention.
Inhalation	Immediately remove affected person to fresh air. If irritation develops, seek medical attention.
Ingestion	Rinse mouth out with water. Induce vomiting if significant quantities ingested. Seek medical attention.

Section 5 – Firefighting Measures

Fire and Explosion Hazard Overview	This material is considered non-flammable and non-combustible.
Auto-Ignition Temperature	N/A
Flash Point and Method Used	N/A
LEL/UEL	N/A
Unusual Fire and Explosion Hazards	None.
Special Fire Fighting Procedures	No Special procedures required.
Extinguisher Media	No special media required.

Section 6 – Accidental Release Measures

Steps to be Taken if Material is Accidentally Spilled or Released: Avoid creating airborne dust. Pick up with shovel or mechanical equipment. Wet methods and vacuuming may be used on spills.

Section 7 – Handling and Storage

Precautions to be Taken	Keep material dry in storage. No special handling required. Avoid creating airborne dust. Not an electrical conductor.
Other Precautions and/or Special Hazards	None.

Section 8 – Exposure Controls / Personal Protection

Respiratory Protection	If airborne dust exposure approaches the TLV or PEL use half-mask or full-face air-purifying respirator equipped with NIOSH or MSHA-approved high efficiency filter for protection against pneumoconiosis producing dust. An airline respirator may be required when dust levels are extremely high.
Protective Gloves	Limit contact with skin. Use rubber or cloth gloves as necessary.
Eye Protection	Wear goggles or face shield as appropriate. Avoid contact lenses.
Ventilation to be Used	Keep dust levels below PEL. Use general and local exhaust ventilation and dust collection systems to keep dust levels within acceptable limits.
Other Protective Clothing and Equipment	None normally required. Wear long sleeves and long pants to reduce skin contact. Use work gloves, goggles and face shield, as necessary.
Hygienic Work Practices	Do not allow dust to get into eyes, to be inhaled, to be swallowed, or to remain on skin if irritation occurs. Practice good personal hygiene. Wash or shower after use. Launder clothes as normal.

Section 9 – Physical and Chemical Properties

Appearance	Off-White Powder
Upper/Lower Flammability or Explosive Limits	N/A
Odor	None
Vapor Pressure (mm HG and Temp)	N/A
Odor Threshold	None
Vapor Density	N/A
pH	8.5 – 9.0
Specific Gravity (H₂O = 1)	2.6
Melting (Softening) Point	900° C
Solubility in Water	Insoluble
Initial Boiling Point and Boiling Range	N/A
Flash Point	N/A
Evaporation Rate	N/A
Flammability (solid gas)	N/A
Partition Coefficient	N/A
N-octanol/water	N/A
Auto-ignition Temperature	N/A
Decomposition Temperature	> 2000° C
Viscosity	N/A

Section 10 – Stability and Reactivity

Stability	Stable.
Conditions to Avoid	None Known.
Hazardous Decomposition Products	Unknown and not suspected.
Hazardous Polymerization	Not known to occur.
Reactivity	When mixed with cement and concrete products in its intended use, the material reacts in the normal way as a “pozzolan” with the lime and alkalis present to form calcium silicate hydrates. Material is considered inert in polymer and resin systems. Avoid contact with strong acids, reducing agents, and oxidizers.

Section 11 – Toxicological Information

The following lists indicate whether-or-not the indicated agency has listed the product as a carcinogen.

Carcinogenicity	NTP - Not Listed; IARC - Not Listed; OSHA - Not Listed.
LD50	Oral (g/kg) - Not Available; Dermal (g/kg) - Not Available; Inhalation (ppm, 8hrs) - Not Available.

Section 12 – Ecological Information

Considered to be an inert solid waste, no special precautions should be taken in case it is released or spilled. These products do not contain, nor are manufactured with, Class I or Class II Ozone-Depleting Chemicals (CFCs) identified in the Clean Air Act Amendment, 1990 List of Ozone Depleting Chemicals.

Section 13 – Disposal Considerations

Considered non-hazardous per EPA, RCRA 40CFR, Part 261, 1990. Handle as inert bulk material. Material may be disposed of as a non-hazardous solid waste consistent with State, Federal and Local disposal regulations. Disposal in a sanitary landfill is usually adequate. Material integrated into cement/concrete products must be disposed of in accordance with applicable requirements for those products where they exist.

Section 14 – Transport Information

Not regulated by the Department of Transportation (DOT).

Section 15 – Regulatory Information

United States: (a) EPA Toxic Substances Control Act (TSCA): The applicable CAS number is 65997-17-3, corresponding to "Glass Oxide." All the raw material components of the glass oxide are in the TSCA Inventory. (b) EPA SARA Title III: R-E-D Industrial Products considers these products exempt as they do not meet its health or physical hazards definitions nor contain any SARA 313 chemical ingredients in excess. (c) OSHA Hazard Communication Standard: Subject to the applicable requirements of this regulation. (d) Right to Know Law: Per this SDS revision date, these products are not known to contain chemical ingredients listed by the Pennsylvania, New Jersey or Massachusetts Right to Know Law in excess of amounts requiring reporting on such substances' SDS or labels. (e) California Proposition 65: No ingredient is listed. (f) Clean Air Act: No ingredient is listed.

Canada: These products are exempt from Canadian Environmental Protection Act (CEPA) reporting on the Domestic Substances Lists. They are also exempt from Workplace Hazardous Materials Information System (WHMIS) labeling & SDS requirements.

European Economic Committee (EEC) Labeling Classification: These products do not meet the classification for a "dangerous substance" according to 67/548/EEC and 97/69/EC. The composition has been incorporated in the EINECS under CAS number 65997-17-3 as a glass oxide.

Japan: Chemical Substances Control Law: Exempt from this law.

Section 16 – Other Information

Disclaimer: Information herein is based on data considered to be accurate as of date prepared. No warranty or representation, express or implied, is made as to the accuracy or completeness of this data and safety information. No responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.