



SDS – Safety Data Sheet

Section 1: Identification

Product Identifier Crushed Glass

Synonyms: Crushed Glass, Abrasive Blast Media

Product Name Clean Bite, R14-T, R18-F, Coarse, Medium, Fine, R21-T, R28-F, R100

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


Recommended Use	Material is a granular material for use as an abrasive blasting media and various other industrial applications. This product is amorphous and contains no free crystalline silica. This MSDS covers many grades and individual physical and chemical properties.
------------------------	---

Details of the supplier of the safety data sheet

Manufacturer	NC Minerals, LLC
	1401 WEST 94 TH ST.
	MINNEAPOLIS, MN 55431
	United States
	http://www.ncm-minerals.com/
Telephone (General)	(952) 943-2244

Emergency telephone number **911 / 952-212-6541**

Section 2: Hazard Identification

Classification of Substance or Mixture	
OSHA HCS 2012	Specific Target Organ Toxicity - Repeated Exposure, Category 1
Label elements	
OSHA HCS 2012	DANGER
	
Hazard statement	May cause eye irritation. Causes damage to organs through prolonged or repeated exposure. May cause respiratory tract irritation
Precautionary statements	
Prevention	Wear eye protection. Avoid breathing dust. Wear respiratory protection (in case of inadequate ventilation).
Response	IF ON SKIN: Rinse with water. IF IN EYES: Rinse with water, seek medical attention if discomfort continues. IF INHALED: Move the exposed person to fresh air, keep at rest and comfortable. IF SWALLOWED: Rinse mouth.
Storage/Disposal	
Storage	Keep product dry.
Disposal	Generally inert. Dispose in accordance with regulations.

Section 3: Composition/Information on Ingredients

CAS No.	Chemical Name	Percent wt.
65997-17-3	Glass, amorphous	100%
7631-86-9	Silicon Dioxide	60-75%
1344-81-2	Aluminum Oxide	<2.1%
1305-78-8	Calcium Oxide	5-12%
1309-48-4	Magnesium Oxide	<4%
1313-59-3	Sodium Oxide	12-18%
68784-55-4	Calcium Phosphate	< 1.2%

Section 4: First-Aid Measures

Description of First Aid Measures	
Inhalation	If discomfort, irritation or symptoms of pulmonary involvement develop, remove from exposure, give oxygen and seek medical attention.
Skin	Remove contaminated clothing. Thoroughly wash affected area with mild soap or detergent and water and prevent further contact. Seek medical attention if irritation occurs.
Eye	Do not rub eyes. Wash eyes, including under eyelids, immediately with copious amounts of water for 15 minutes. Contact lenses should not be worn when working with this material. Seek medical attention.
Ingestion	In the unlikely event of ingestion of a large quantity of material, do not induce vomiting; drink water or milk; seek medical attention.
Most important symptoms and effects	
Acute (immediate)	Refer to Section 11 - Toxicological Information.
Chronic (delayed)	Refer to Section 11 - Toxicological Information.
Indication of any immediate medical attention and special treatment needed	
Notes to Physician	All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5: Fire-Fighting Measures

Extinguishing media	
Suitable Extinguishing Media	Non-flammable
Unsuitable Extinguishing Media	No specific information.
Special hazards arising from the substance or mixture	
Unusual Fire and Explosion Hazards	No specific information
Hazardous Combustion Products	No specific information
Advice for Firefighters	Standard personal protective equipment.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	
Personal Precautions	Use adequate ventilation or dust mask approved by NIOSH. Wear adequate eye protection.
Emergency Procedures	No special emergency procedures, use adequate ventilation.
Environmental Precautions	
	Avoid run off to waterways and sewers
Methods and material for containment and cleaning up	
Containment	Contain and cover spill to minimize dust emission
Clean-up	Clean up by sweeping, shoveling, vacuuming, or flushing with water.
Neutralizing Chemicals	None required
Disposal	Generally inert. Dispose in accordance with regulations – or recycle and use beneficially in other applications.

Section 7: Handling and Storage

Precautions for safe Handling	
Handling	Use adequate ventilation and/or dust mask approved by NIOSH. Wear adequate eye protection. Exposed skin may become dry and irritated with prolonged contact. Avoid contact with food and ingestion.
Conditions for safe storage, including any incompatibilities	
Storage	Keep product dry. Provide proper ventilation when handling this material to minimize dust.
Incompatible Materials or Ignition Sources	Avoid contact with hydrofluoric acid

Section 8: Exposure Controls/Personal Protection

Chemical Name	Percent wt.	ACGIH TLV (TWA) (mg/m ³)	OSHA PEL (TWA) (mg/m ³)	NIOSH REL (TWA) (mg/m ³)	Cancer
Glass, amorphous	100%	10	10	6	No
Silicon Dioxide	60-75%	10	15 (total) 5 (resp)	6	No
Aluminum Oxide	<2.1%	10	10 (total) 5 (resp)	Not established	No
Calcium Oxide	5-12%	2	2	2	No
Magnesium Oxide	<4%	10 (fume)	10 (total) (resp)	1	No
Sodium Oxide	12-18%	Not established	Not established	Not established	No
Calcium Phosphate	< 1.2%	10 (total)	15 (total)	Not established	No

Control Parameters

Ensure ventilation is adequate to maintain dust exposure below the exposure standard for personnel adjacent to the grit blasting area.

Ensure that all blast cleaning equipment complies with Workcover and all appropriate Regulatory Authority Regulations and Codes of Practice.

Exposure Controls

Operator must wear Abrasive Blast Helmet Air Line Respirator of a type complying with AS1716. A protective Leather Jacket or suit, Leather Hand and Foot protection with Steel Toe Cap inserts. Use hearing protection when working in blast cleaning operations.

Respiratory Protection: Appropriate dust mask should be used. Avoid prolonged or frequent exposure to media unless there is adequate ventilation.

Ventilation: Avoid inhalation of any airborne dust. Provide local exhaust

Hand and Eye Protection: Appropriate hand and eye protection should be worn (goggles, safety gloves). Protect eye/skin from flying glass fragments.

Section 9: Physical and Chemical Properties
--

Material Description			
Physical Form	Off-White powder	Appearance/Description	Crushed glass
Color	Off-White	Odor	Negligible
Taste	Negligible	Particulate Type	
Particulate Size	76 µg	Aerosol type	Not relevant
Odor Threshold	NA	Physical and Chemical Properties	Data Lacking
General Properties			
Boiling Point	NA	Melting Point	800° C
Decomposition Temperature	NA	Heat of Decomposition	Data Lacking
pH	6	Specific Gravity/Relative Density	2.46
Density	88 lbs/cu. Ft.	Bulk Density	Data lacking
Water Solubility	Insoluble	Solvent Solubility	Data lacking
Viscosity	Not relevant	Explosive Properties	
Oxidizing Properties			
Volatility			
Vapor Pressure	Not relevant	Vapor Density	Not relevant
Evaporation Rate	Not relevant	VOC (Wt.)	Not relevant
VOC (Vol.)	Not relevant	Volatiles (Wt.)	Not relevant
Volatiles (Vol.)	Not relevant		
Flammability			
Flash Point	Not combustible	UEL	Not relevant
LEL	Not relevant	Autoignition	Not relevant
Self-Accelerating Decomposition Temperature (SADT)	Not relevant	Heat of Combustion (ΔHc)	Not relevant
Burning Time	Not relevant	Flame Duration	Not relevant

Flame Height	Not relevant	Flame Extension	Not relevant
Ignition Distance	Not relevant	Flammability (solid, gas)	Not combustible
Environmental			
Half Life	Data lacking	Octanol/Water Partition coefficient	Not relevant
Coefficient of water/oil distribution	Not relevant	Bioaccumulation Factor	Data lacking
Bioconcentration Factor	Data lacking	Biochemical Oxygen Demand (BOD/BOD5)	Not relevant
Chemical Oxygen Demand	Data lacking	Persistence	Data lacking
Degradation	Data lacking		

Section 10: Stability and Reactivity

Reactivity	Most common chemicals are non-reactive with glass
Chemical Stability	Stable under normal conditions
Possibility of hazardous Reactions	Glass will react with Hydrofluoric Acid
Conditions to avoid	As with any dust, there is the potential for a dust explosion and thus ventilation should be such that gross levels of dust do not accumulate.
Incompatible materials	Glass will react with Hydrofluoric Acid
Hazardous decomposition products	Will not occur

Section 11: Toxicological Information

Information on toxicological effects

GHS Properties	Classification
Acute toxicity	OSHA HCS 2012 • Classification criteria not met
Aspiration Hazard	OSHA HCS 2012 • Classification criteria not met
Carcinogenicity	OSHA HCS 2012 • Classification criteria not met
Germ Cell Mutagenicity	OSHA HCS 2012 • Classification criteria not met
Respiratory sensitization	OSHA HCS 2012 • Classification criteria not met
Serious eye damage/Irritation	OSHA HCS 2012 • Classification criteria not met
Skin corrosion/Irritation	OSHA HCS 2012 • Classification criteria not met
Skin sensitization	OSHA HCS 2012 • Classification criteria not met
STOT-RE 2	OSHA HCS 2012 • May cause damage to organs through prolonged or repeated exposure
STOT-SE	OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: respiratory irritation
Toxicity for Reproduction	OSHA HCS 2012 • Classification criteria not met

Target Organs	
Route(s) of entry/exposure	Skin Contact; Eye Contact; Inhalation; Ingestion
Potential Health Effects	
Inhalation	
Acute (Immediate)	Irritation, coughing
Chronic (Delayed)	Respiratory irritation, pneumoconiosis
Skin	
Acute (Immediate)	Irritation
Chronic (Delayed)	Data lacking
Eye	
Acute (Immediate)	Irritation
Chronic (Delayed)	Data lacking
Ingestion	
Acute (Immediate)	Irritation
Chronic (Delayed)	Data lacking

Section 12: Ecological Information

Toxicity	Material data lacking
Persistence and degradability	Material data lacking
Bioaccumulative potential	Material data lacking
Mobility in Soil	Material data lacking
Other adverse effects	Material data lacking
Other Information	Material data lacking

Section 13: Disposal Considerations

Waste treatment methods

Product waste	Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
Packaging waste	Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14: Transport Information

UN Number: Not applicable.

UN Proper shipping names: Not applicable.

Transport Hazard Class: Not applicable.

Packaging group: Not applicable.

Shipping and Transportation – Crushed glass is classified as a non-hazardous material by the Canadian Transportation of Dangerous Good (TDG) Regulations and the US Department of Transportations (DOT).

EU Transportation: Road (ADR); Rail (RID); Sea (IMDG); Air (ICO/IATA) – not restricted.

International Maritime Dangerous Goods (IMDG Code) – Not classified.

Transport in bulk EU Annex II of MARPOL73/78 and the IBC Code) – Not applicable.

Section 15: Regulatory information

CAS No.	Chemical Name	SARA 302	SARA 304	SARA 314	RCRA	CAA Sec. 112
65997-17-3	Glass, amorphous	No	No	No	No	No
7631-86-9	Silicon Dioxide	No	No	No	No	No
1344-81-2	Aluminum Oxide	No	No	No	No	No
1305-78-8	Calcium Oxide	No	No	No	No	No
1309-48-4	Magnesium Oxide	No	No	No	No	No
1313-59-3	Sodium Oxide	No	No	No	No	No
68784-55-4	Calcium Phosphate	No	No	No	No	No

Section 16: Other Information

Last Revision Date	10-17-16
Preparation Date:	7-9-15
Disclaimer/Statement of Liability	The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstance of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1