

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 11/22/2021 Revision date: 11/22/2021 Supersedes: 11/16/2016

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Unicrete 28 LI
CAS-No. : Mixture
Product code : 3124

Other means of identification : Alumina-Silicate Cement Bonded Castable

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Refractory Recommended use : Industrial use

1.3. Supplier

Resco Products. Inc.

One Robinson Plaza, Suite 300

6600 Steubenville Pike

Pittsburgh, PA 15205 - United States

412-494-4491

SDS@RescoProducts.com - WWW.RescoProducts.com

1.4. Emergency telephone number

Emergency number : EMERGENCY ONLY (CHEMTREC) USA & Canada 1-800-424-9300

Outside USA & Canada +1 703-741-5970

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation Category 2 H315 Causes skin irritation Serious eye damage/eye irritation Category 2B H320 Causes eye irritation

Carcinogenicity Category 1A H350 May cause cancer (Inhalation)

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US) : Danger

Hazard statements (GHS US)

: H315 - Causes skin irritation
H320 - Causes eye irritation
H350 - May cause cancer (Inhalation)

Precautionary statements (GHS US) : P280 - Wear eye protection, Dust respirator, protective gloves.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P332+P313 - If skin irritation occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention.

P260 - Do not breathe dust.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Calcium Aluminate Cement	(CAS-No.) 65997-16-2	10 – 20	Skin Irrit. 2, H315 Eye Irrit. 2B, H320
cristobalite	(CAS-No.) 14464-46-1	10 – 20	Carc. 1A, H350
quartz	(CAS-No.) 14808-60-7	1 – 5	Carc. 1A, H350

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Descri	ption of first	aid measures
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First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Allow affected person to breathe fresh air. Allow the victim to rest. : Wash with plenty of soap and water. Wash contaminated clothing before reuse.

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First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

First-aid measures after ingestion Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and

symptoms

: Based on available data, the classification criteria are not met.

May cause cancer by inhalation. Danger of serious damage to health by prolonged exposure

through inhalation.

Symptoms/effects after skin contact Causes skin irritation. Symptoms/effects after eye contact Causes eye irritation.

Immediate medical attention and special treatment, if necessary

No additional information available

Symptoms/effects after inhalation

SECTION 5: Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media In case of fire, all extinguishing media allowed.

Specific hazards arising from the chemical

Fire hazard : Not flammable.

5.3 Special protective equipment and precautions for fire-fighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering

environment.

Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Do not breathe dust.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

Environmental precautions

Prevent entry to sewers and public waters.

Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust.

Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

Precautions for safe handling

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Avoid raising dust.

Avoid contact with skin and eyes. Do not breathe dust.

Hygiene measures Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

Conditions for safe storage, including any incompatibilities

Storage conditions Store this product in a dry location where it can be protected from the elements.

Incompatible products Strong bases. Strong acids.

SECTION 8: Exposure controls/personal protection

Control parameters

Unicrete 28 LI (Mixture)			
No additional information available			
Calcium Aluminate Cement (65997-16-2)			
No additional information available			
cristobalite (14464-46-1)			
USA - ACGIH - Occupational Exposure Limits			
ACGIH TWA (mg/m³)	0.025 mg/m³ respirable dust		
USA - OSHA - Occupational Exposure Limits			
OSHA PEL (TWA) (mg/m³)	0.05 mg/m³ respirable dust		
quartz (14808-60-7)			
USA - ACGIH - Occupational Exposure Limits			
ACGIH TWA (mg/m³)	0.025 mg/m³ (Silica-Crystalline Quartz; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction)		
USA - OSHA - Occupational Exposure Limits			
Local name	Silica, crystalline quartz, respirable dust		
OSHA PEL (TWA) (mg/m³)	0.05 mg/m³ respirable dust		
Remark (OSHA)	(3) See Table Z-3.		

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8.2. Appropriate engineering controls

Appropriate engineering controls : Provide adequate ventilation to minimize dust concentrations.

Not Applicable

No data available

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves.

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Wear appropriate mask

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Granular mixture.
Color : light brown
Odor : earthy

Odor threshold : Not applicable pH : No data available

: > 2000 °F Melting point Freezing point : Not applicable Boiling point : Not applicable Critical temperature Not applicable Critical pressure Not applicable Flash point Not applicable Relative evaporation rate (butyl acetate=1) Not applicable Relative evaporation rate (ether=1) Not applicable Flammability (solid, gas) Non flammable. Vapor pressure : Not Applicable

Relative density : ≈ 1.7

Solubility Slightly soluble. Partition coefficient n-octanol/water (Log Pow) : No data available Auto-ignition temperature : Not applicable Decomposition temperature : No data available Viscosity, kinematic No data available Viscosity, dynamic Not Applicable **Explosion limits** Not applicable Explosive properties : No data available Oxidizing properties : No data available Other information 9.2.

No additional information available

Vapor pressure at 50 °C

Relative vapor density at 20 °C

SECTION 10: Stability and reactivity

10.1. Reactivity

Hydraulic setting.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Avoid dust formation.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

No additional information available

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SECTION 11: Toxicological informatio	n en		
11.1. Information on toxicological effects			
Acute toxicity (oral)	: Not classified		
Acute toxicity (dermal)	: Not classified		
Acute toxicity (inhalation)	: Not classified		
Skin corrosion/irritation	: Causes skin irritation.		
Serious eye damage/irritation	: Causes eye irritation.		
Respiratory or skin sensitization Germ cell mutagenicity	: Not classified : Not classified		
Carcinogenicity	: May cause cancer (Inhalation).		
quartz (14808-60-7)	iviay cause cancer (illinatation).		
IARC group	1 - Carcinogenic to humans		
Reproductive toxicity	: Not classified		
STOT-single exposure	: Not classified		
STOT-repeated exposure	: Not classified		
Aspiration hazard	: Not classified		
Viscosity, kinematic	: No data available		
Potential Adverse human health effects and	: Based on available data, the classification criteria are not met.		
symptoms			
Symptoms/effects after inhalation	: May cause cancer by inhalation. Danger of serious damage to health by prolonged exposure		
0	through inhalation.		
Symptoms/effects after skin contact	: Causes skin irritation.		
Symptoms/effects after eye contact	: Causes eye irritation.		
SECTION 12: Ecological information			
12.1. Toxicity			
No additional information available			
12.2. Persistence and degradability			
Unicrete 28 LI (Mixture)			
Persistence and degradability	Not established.		
cristobalite (14464-46-1)			
Persistence and degradability	Mineral. Not applicable.		
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Chemical oxygen demand (COD)	Not applicable		
ThOD	Not applicable		
BOD (% of ThOD)	Not applicable		
quartz (14808-60-7)			
Persistence and degradability	Not applicable.		
Biochemical oxygen demand (BOD)	Not applicable		
Chemical oxygen demand (COD)	Not applicable		
ThOD	Not applicable		
12.3. Bioaccumulative potential			
Unicrete 28 LI (Mixture)			
Bioaccumulative potential	Not established.		
cristobalite (14464-46-1)			
Bioaccumulative potential	No data available.		
quartz (14808-60-7)			
Bioaccumulative potential	No data available.		
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12.4. Mobility in soil			
cristobalite (14464-46-1)			
	No data available.		
cristobalite (14464-46-1) Ecology - soil	No data available.		
cristobalite (14464-46-1) Ecology - soil 12.5. Other adverse effects			
cristobalite (14464-46-1) Ecology - soil 12.5. Other adverse effects Effect on the global warming	None known		
cristobalite (14464-46-1) Ecology - soil 12.5. Other adverse effects Effect on the global warming Other information	None known : No other effects known.		
cristobalite (14464-46-1) Ecology - soil 12.5. Other adverse effects Effect on the global warming Other information SECTION 13: Disposal considerations	None known : No other effects known.		
cristobalite (14464-46-1) Ecology - soil 12.5. Other adverse effects Effect on the global warming Other information SECTION 13: Disposal considerations 13.1. Disposal methods	None known : No other effects known.		
cristobalite (14464-46-1) Ecology - soil 12.5. Other adverse effects Effect on the global warming Other information SECTION 13: Disposal considerations	None known : No other effects known.		

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SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Transportation of Dangerous Goods

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

Unicrete 28 LI (Mixture)

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

CANADA

Calcium Aluminate Cement (65997-16-2)

Listed on the Canadian DSL (Domestic Substances List)

cristobalite (14464-46-1)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

quartz (14808-60-7)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

cristobalite (14464-46-1)

Unicrete 28 LI (Mixture)		
U.S California - Proposition 65 - Other	This product contains crystalline silica, a chemical known to the state of California to	
information	cause cancer. For more information go to WWW.P65Warnings.ca.gov	

U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		
quartz (14808-60-	-7)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		

Component	State or local regulations
Cristobalite (14464-46-1)	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List
Quartz (14808-60-7)	U.S New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

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Revision date : 11/22/2021

Other information : Report language name. English. In the event of any conflict between English and other

language versions, the English version shall prevail.

Full text of H-phrases:

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	H315	Causes skin irritation
	H320	Causes eye irritation
	H350	May cause cancer

SDS US (GHS HazCom 2012)

This information and recommendations set forth herein are taken from sources believed to be accurate as of the date herein, however, Resco Products, Inc. makes no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assumes no liability to any user thereof.

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