

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 12/20/2021 Revision date: 12/20/2021 Supersedes: 02/06/2017

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : Unicrete 80 CLC SM1

CAS-No. : Mixture Product code : 3146

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
aluminium oxide, non-fibrous	(CAS-No.) 1344-28-1	50 – 75	Not classified
quartz	(CAS-No.) 14808-60-7	5 – 10	Carc. 1A, H350
Calcium Aluminate Cement	(CAS-No.) 65997-16-2	1 – 5	Skin Irrit. 2, H315 Eye Irrit. 2B, H320
cristobalite	(CAS-No.) 14464-46-1	0.5 – 1	Carc. 1A, H350

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

SECTION 4: First-aid measures

4.1. Description of first aid measures

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.

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First-aid measures after skin contact Wash with plenty of soap and water. Wash contaminated clothing before reuse.

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) 4.2.

symptoms

Based on available data, the classification criteria are not met. Potential Adverse human health effects and

Symptoms/effects after inhalation : 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

SECTION 5: Fire-fighting measures

Suitable (and unsuitable) extinguishing media

: Use extinguishing media appropriate for surrounding fire. Suitable extinguishing media

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

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

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

: Do not breathe dust. **Emergency procedures**

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.

6.3. 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.

7.2. 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 80 CLC SM1 (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			
aluminium oxide, non-fibrous (1344-28-1)			
USA - ACGIH - Occupational Exposure Limits			
ACGIH TWA (mg/m³)	1 mg/m³ respirable dust		
quartz (14808-60-7)	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)			

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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.

8.2. Appropriate engineering controls

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

No data available

3.3. 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	nhysical and	chemical propertie

Physical state : Solid

Appearance : Granular mixture.

Color : Gray
Odor : earthy

Odor threshold : Not applicable pH : No data available

Melting point : > 2500 °F
Freezing point : Not applicable
Boiling point : Not applicable

Critical temperature : 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 : No data available Vapor pressure at 50 °C : Not Applicable

Relative vapor density at 20 °C : No dat Relative density : ≈ 2.8

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 : No data available

Explosion limits : Not applicable

Explosive properties : No data available
Oxidizing properties : No data available

9.2. Other information

No additional information available

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.

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10.5. I	ncompatible materials
Strong aci	ds. Strong bases.
10.6.	Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

aluminium avida nan filmana (4244 00 4)		
Acute toxicity (inhalation)	: Not classifie	ŀd
Acute toxicity (dermal)	 Not classifie 	d
Acute toxicity (oral)	 Not classifie 	d
11.1. Illiorination on toxicological effects		

aluminium oxide, non-fibrous (1344-28-1)		
LD50 oral rat		> 15900 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral)
	LC50 Inhalation - Rat	7.6 mg/l air (Equivalent or similar to OECD 403, 1 h, Rat, Male, Experimental value, Inhalation (aerosol))
	Skin corrosion/irritation : Causes skin irritation	

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified

Carcinogenicity : May cause cancer (Inhalation).

quartz (14808-60-7)

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

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

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 80 CLC SM1 (Mixture)

Unicrete 80 CLC 5M1 (MIXture)	
Persistence and degradability	Not established.
cristobalite (14464-46-1)	
Persistence and degradability	Mineral. Not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
aluminium oxide, non-fibrous (1344-28-1)	
Persistence and degradability	Not applicable.
Chemical oxygen demand (COD)	Not applicable
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 80 CLC SM1 (Mixture)		
Bioaccumulative potential	Not established.	
cristobalite (14464-46-1)		
Bioaccumulative potential	No data available.	
aluminium oxide, non-fibrous (1344-28-1)		
Bioaccumulative potential No data available.		

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quartz (14808-60-7)	
Bioaccumulative potential	No data available.

12.4. Mobility in soil

cristobalite (14464-46-1)		
Ecology - soil	No data available.	
aluminium oxide, non-fibrous (1344-28-1)		
Ecology - soil	No data available.	

12.5. Other adverse effects

Effect on the global warming None known

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

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 80 CLC SM1 (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

aluminium oxide, non-fibrous (1344-28-1)

Not subject to reporting requirements of the United States SARA Section 313

Note: The section 313 chemical list contains "CAS # 1344-28-1 Aluminum Oxide (Fibrous forms)"; the Aluminum oxide contained in this product is non-fibrous, and thus is not a section 313 material. Only manufacturing, processing, or

otherwise use of aluminum oxide in the fibrous form triggers reporting.

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)

aluminium oxide, non-fibrous (1344-28-1)

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

Unicrete 80 CLC SM1 (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	

cristobalite (14464-46-1)						
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			

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quartz (14808-60-	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
aluminium oxide, non-fibrous (1344-28-1)	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 : 12/20/2021

: Report language name. English. In the event of any conflict between English and other language versions, the English version shall prevail. Other information

Full text of H-phrases:

H315 Causes skin irritation		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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