

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 08/19/2022

SECTION 1: Identification				
1.1. Identification				
Product form Product name CAS-No. Product code	Article Uniform 80CLC 102 Mixture 3274 Pre-Cast Refractory			
1.2. Recommended use and restrictions on u	-	, <b>-</b>		
	Refractory			
Recommended use	Industrial use			
1.3. Supplier				
Manufacturer Resco Products, Inc. One Robinson Plaza, Suite 300 6600 Steubenville Pike Pittsburgh, PA, 15205 United States 412-494-4491 <u>SDS@RescoProducts.com</u> - <u>WWW.RescoProducts.com</u> <b>1.4. Emergency telephone number</b>	<u>əm</u>			
		Y (CHEMTREC) USA &	Canada 1-800-	424-9300
		nada +1 703-741-5970		τ∠τ JUUU
SECTION 2: Hazard(s) identification				
2.1. Classification of the substance or mixtur	е			
GHS US classification Not classified				
2.2. GHS Label elements, including precaution	onary statements			
This product meets the definition and criteria for an art regulations.	icle according to OSH	IA 29 CFR 1910.1200 ar	nd the EU REAC	CH 1907/2006 Article 3(3)
2.3. Other hazards which do not result in classification			nch and drop ha	azards, use of gloves and safety
2.4. Unknown acute toxicity (GHS US)				
Not applicable				
SECTION 3: Composition/Information or	n ingredients			
3.1. Substances				
Not applicable				
3.2. Mixtures				
Name			%	GHS US classification
aluminium oxide, non-fibrous		CAS-No.: 1344-28-1 CAS-No.: 14808-60-7	50 – 75 5 – 10	Not classified Carc. 1A, H350
quartz Calcium Aluminate Cement		CAS-No.: 14808-80-7 CAS-No.: 65997-16-2	1-5	Skin Irrit. 2, H315 Eye Irrit. 2B, H320
cristobalite	11	CAS-No.: 14464-46-1	0.5 – 1	Carc. 1A, H350
Full text of hazard classes and H-statements : see sec SECTION 4: First-aid measures				
4.1. Description of first aid measures				
	Never give anything	n by mouth to an uncons	cious person. If	you feel unwell, seek medical advice
First-aid measures after inhalation First-aid measures after skin contact First-aid measures after eye contact	<ul> <li>(show the label whe</li> <li>Allow affected personal</li> <li>Gently wash with place</li> <li>IF IN EYES: Rinse and easy to do. Contemport</li> </ul>	ere possible). on to breathe fresh air. A lenty of soap and water. cautiously with water for ntinue rinsing.	llow the victim to several minutes	o rest. s. Remove contact lenses, if present
First-aid measures after ingestion 4.2. Most important symptoms and effects (a		OT induce vomiting. Obta	an emergency i	
		data, the classification c	riteria are not m	let.

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Symptoms/effects after skin contact Symptoms/effects after eye contact	<ul> <li>Danger of serious damage to health by prolonged exposure through inhalation. May cause cancer by inhalation.</li> <li>Causes skin irritation.</li> <li>Causes eye irritation.</li> </ul>
Symptoms/effects after ingestion	: No data available.
4.3. Immediate medical attention and specia	I treatment, if necessary
No additional information available	
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguishing	modia
	<ul> <li>Use extinguishing media appropriate for surrounding fire.</li> <li>In case of fire, all extinguishing media allowed.</li> </ul>
5.2. Specific hazards arising from the chemi	cal
Fire hazard	: Not flammable.
5.3. Special protective equipment and preca	utions for fire-fighters
	: Exercise caution when fighting any chemical fire.
	: Do not enter fire area without proper protective equipment, including respiratory protection.
<b>SECTION 6: Accidental release measure</b>	es
6.1. Personal precautions, protective equipm	nent and emergency procedures
6.1.1. For non-emergency personnel	
Protective equipment	: Gloves. Safety shoes.
Emergency procedures	: Avoid contact with skin and eyes. Do not breathe dust.
6.1.2. For emergency responders	En la characteristica de la construction
Protective equipment Emergency procedures	<ul> <li>Equip cleanup crew with proper protection.</li> <li>On land, sweep or shovel into suitable containers.</li> </ul>
6.2. Environmental precautions	
No additional information available	
	a distance in a sur
6.3. Methods and material for containment a	
For containment Methods for cleaning up	<ul> <li>Collect spillage.</li> <li>On land, sweep or shovel into suitable containers. Minimize generation of dust.</li> </ul>
0.1	
6.4. Reference to other sections	
See Heading 8. Exposure controls and personal prote	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Do not handle until all safety precautions have been read and understood. 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 a	• •
	: Store this product in a dry location where it can be protected from the elements.
	: Store this product in a dry location where it can be protected from the elements. : Strong bases. Strong acids.
SECTION 8: Exposure controls/persona	
8.1. Control parameters	
Uniform 80CLC 102 (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 OEL TWA	0.025 mg/m <sup>3</sup> respirable dust
USA - OSHA - Occupational Exposure Limits OSHA PEL (TWA) [1]	0.05 mg/m <sup>3</sup> respirable dust
aluminium oxide, non-fibrous (1344-28-1)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	1 mg/m <sup>3</sup> respirable dust

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quartz (14808-60-7)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	0.025 mg/m <sup>3</sup> (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) [1]	0.05 mg/m <sup>3</sup> respirable dust
Remark (OSHA)	(3) See Table Z-3.
8.2. Appropriate engineering controls	
Appropriate engineering controls :	Dust on tear out. Provide adequate ventilation to minimize dust concentrations.
8.3. Individual protection measures/Personal	protective equipment
Personal protective equipment: Avoid all unnecessary exposure.	
Hand protection:	
Wear protective gloves.	
Skin and body protection:	
Wear suitable protective clothing. Safety shoes	
Respiratory protection:	
Dust on tear out. Wear appropriate mask	
Other information: Do not eat, drink or smoke during use.	
SECTION 9: Physical and chemical prop	
9.1. Information on basic physical and chemi	
5	Solid
Appearance :	Solid in various shapes.
Color :	Gray
Odor : Odor threshold :	odorless Net applicable
	Not applicable Not applicable
pH :	No data available
Melting point	> 3000 °F
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 : Vapor pressure at 50 °C :	Not Applicable
Relative vapor density at 20 °C	Not Applicable No data available
Relative density at 20 0	≈ 2.7
Solubility	Insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	No data available
Auto-ignition temperature :	Not applicable
Decomposition temperature :	No data available
Viscosity, kinematic :	Not Applicable
Viscosity, dynamic :	Not Applicable
Explosion limits :	Not applicable
Explosive properties :	Not applicable No data available
Oxidizing properties	No data available
9.2. Other information	
No additional information available	
SECTION 10: Stability and reactivity	
10.1. Reactivity	
None known	

None known.

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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	
SECTION 11: Toxicological information	
11.1. Information on toxicological effects	
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
aluminium oxide, non-fibrous (1344-28-1)	15000 mg//g body weight /Equivalent or similar to OECD 404. Bot Male / famale
	> 15900 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LC50 Inhalation - Rat	> 2.3 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value,
	Inhalation (aerosol), 14 day(s))
	: Not classified
Calcium Aluminate Cement (65997-16-2)	
рН	≤ 13
cristobalite (14464-46-1)	
рН	6-7
aluminium oxide, non-fibrous (1344-28-1)	
рН	9 – 10.5 (aqueous suspension, 33 %)
quartz (14808-60-7)	
pH Coriero que demons (initation	6-7
	: Not classified
Calcium Aluminate Cement (65997-16-2) pH	≤13
cristobalite (14464-46-1)	
pH	6-7
aluminium oxide, non-fibrous (1344-28-1)	
pH	9 – 10.5 (aqueous suspension, 33 %)
quartz (14808-60-7)	
pH	6-7
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
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 Viscosity, kinematic	: Not classified : Not Applicable
aluminium oxide, non-fibrous (1344-28-1)	
Viscosity, kinematic	Not applicable (solid)
Potential Adverse human health effects and	: Based on available data, the classification criteria are not met.
symptoms	
Symptoms/effects after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. May cause
Symptoms/offacts after skip contact	cancer by inhalation.
Symptoms/effects after skin contact Symptoms/effects after eye contact	Causes skin irritation.     Causes eye irritation.
Symptoms/effects after ingestion	: No data available.

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<b>SECTION 12: Ecological information</b>	
12.1. Toxicity	
aluminium oxide, non-fibrous (1344-28-1)	
LC50 - Fish [1]	> 100 mg/l (96 h, Salmo trutta, Literature study)
EC50 - Crustacea [1]	> 100 mg/l (48 h, Daphnia magna, Literature study)
12.2. Persistence and degradability	
Uniform 80CLC 102 (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) ThOD	Not applicable
	Not applicable
quartz (14808-60-7) Persistence and degradability	Not appliable
Biochemical oxygen demand (BOD)	Not applicable. Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
12.3. Bioaccumulative potential	
Uniform 80CLC 102 (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.
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)	
Surface tension	No data available in the literature
Ecology - soil	No data available.
12.5. Other adverse effects	
Effect on the global warming :	None known
Other information :	No other effects known.
SECTION 13: Disposal considerations	
13.1. Disposal methods	
	Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment.
SECTION 14: Transport information	
In accordance with DOT / TDG / IMDG / IATA Department of Transportation (DOT) Not regulated Transportation of Dangerous Goods	
Not regulated	
Transport by sea	
Not regulated	
Air transport	
Not regulated	

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#### **SECTION 15: Regulatory information**

#### **15.1. US Federal regulations**

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)
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Not subject to reporting require	ements of the United States SARA Section 313
Note	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

#### Uniform 80CLC 102 (Mixture)

U.S. - California - Proposition 65 - Other information This product contai

This product contains crystalline silica, a chemical known to the state of California to cause cancer. For more information go to WWW.P65Warnings.ca.gov

cristobalite (14464-46-	1)				
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk	Maximum allowable
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	level (NSRL)	dose level (MADL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity	Reproductive Toxicity		
		- Female	- Male		
Yes	No	No	No		
quartz (14808-60-7)					
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk	Maximum allowable
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	level (NSRL)	dose level (MADL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity	Reproductive Toxicity		
_		- Female	- Male		
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
CECTION 40. Other information	

SECTION 16: Other information

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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-	Full text of H-phrases		
H315 Causes skin irritation			
H320	H320 Causes eye irritation		
H350 May cause cancer			

Safety Data Sheet (SDS), USA

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.