

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 3/15/2015 Revision date: 7/1/2024 Supersedes: 7/19/2021

SECTION 1: Identification				
1.1. Identification				
Product form Product name CAS-No. Product code Other means of identification	: Mixture : Rescocast 9 : Mixture : 0576 : Alumina-Silicate Cer	nent Bonded Castable		
1.2. Recommended use and restrictions o				
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 T 412-494-4491 <u>SDS@RescoProducts.com</u> - <u>WWW.RescoProduct</u> 1.4. Emergency telephone number	s.com			
Emergency number		Y (CHEMTREC) USA & ada +1 703-741-5970	Canada 1-800)-424-9300
SECTION 2: Hazard(s) identification				
2.1. Classification of the substance or mix	ture			
GHS US classification Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2B Carcinogenicity Category 1A Full text of H statements : see section 16	H311 H320 H350	0 Causes eye		tion)
2.2. GHS Label elements, including preca	utionary statements			
GHS US labeling Hazard pictograms (GHS US)				
Signal word (GHS US) Hazard statements (GHS US) Precautionary statements (GHS US)	P305+P351+P338 - contact lenses, if pre P332+P313 - If skin	rritation ancer (Inhalation) otection, Dust respirator, IF IN EYES: Rinse caut esent and easy to do. Co irritation occurs: Get me irritation persists: Get m	iously with wa ontinue rinsing edical advice/a	ter for several minutes. Remove ttention.
2.3. Other hazards which do not result in	classification			
No additional information available				
2.4. Unknown acute toxicity (GHS US)				
No additional information available				
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	20 – 50	Skin Irrit. 2, H315 Eye Irrit. 2B, H320
		CAC No : 44000 CO 7	10 20	
quartz	I	CAS-No.: 14808-60-7	10 - 20	Carc. 1A, H350

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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.
First-aid measures after skin contact First-aid measures after eye contact	 Gently wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present
Thist-alu measures and eye contact	and easy to do. Continue rinsing.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and effects	
Potential Adverse human health effects and	: Danger of serious damage to health by prolonged exposure through inhalation.
symptoms Symptoms/effects after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. May cause cancer by inhalation.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes eye irritation.
4.3. Immediate medical attention and spec	ial treatment, if necessary
No additional information available	
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguishin	g media
Suitable extinguishing media Unsuitable extinguishing media	 Use extinguishing media appropriate for surrounding fire. In case of fire, all extinguishing media allowed.
5.2. Specific hazards arising from the cher	
Fire hazard	: Not flammable.
5.3. Special protective equipment and pred	cautions for fire-fighters
Firefighting instructions	: Fight fire with normal precautions from a reasonable distance.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release measu	res
6.1. Personal precautions, protective equip	oment and emergency procedures
6.1.1. For non-emergency personnel	. Do not broothe duct. Avoid contact with akin and avon
Emergency procedures 6.1.2. For emergency responders	: Do not breathe dust. Avoid contact with skin and eyes.
Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area. On land, sweep or shovel into suitable containers.
6.2. Environmental precautions	
Prevent entry to sewers and public waters.	
6.3. Methods and material for containment	
Methods for cleaning up	: On land, sweep or shovel into suitable containers. Minimize generation of dust.
6.4. Reference to other sections	totion
See Heading 8. Exposure controls and personal pro	
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 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/persor	nal protection
8.1. Control parameters	
Rescocast 9 (Mixture)	
No additional information available	
Calcium Aluminate Cement (65997-16-2) No additional information available	

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cristobalite (14464-46-1)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	0.025 mg/m ³ respirable dust
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) [1]	0.05 mg/m ³ respirable dust
quartz (14808-60-7)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	0.025 mg/m ³ (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 ³ respirable dust
Remark (OSHA)	(3) See Table Z-3.
8.2. Appropriate engineering controls	
	: Provide adequate ventilation to minimize dust concentrations.
8.3. Individual protection measures/Persona	
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 prop	perties
9.1. Information on basic physical and chem	
9.1. Information on basic physical and chem Physical state	ical properties : Solid
9.1. Information on basic physical and chem Physical state Appearance	ical properties : Solid : Granular mixture.
9.1. Information on basic physical and chem Physical state Appearance Color	ical properties : Solid : Granular mixture. : brown
9.1. Information on basic physical and chem Physical state Appearance Color Odor	ical properties : Solid : Granular mixture. : brown : earthy
9.1. Information on basic physical and chem Physical state Appearance Color Odor Odor threshold	ical properties : Solid : Granular mixture. : brown : earthy : No data available
9.1. Information on basic physical and chem Physical state Appearance Color Odor Odor threshold pH	ical properties : Solid : Granular mixture. : brown : earthy : No data available : ≈ 10.5
9.1. Information on basic physical and chem Physical state Appearance Color Odor threshold pH pH solution concentration	ical properties : Solid : Granular mixture. : brown : earthy : No data available : ≈ 10.5 : 10 %
9.1. Information on basic physical and chem Physical state Appearance Color Odor threshold pH pH solution concentration Melting point	ical properties : Solid : Granular mixture. : brown : earthy : No data available : ≈ 10.5
9.1. Information on basic physical and chem Physical state Appearance Color Odor threshold pH pH solution concentration	ical properties : Solid : Granular mixture. : brown : earthy : No data available : ≈ 10.5 : 10 % : > 2000 °F
9.1. Information on basic physical and chem Physical state Appearance Color Odor Odor threshold pH pH solution concentration Melting point Freezing point	ical properties : Solid : Granular mixture. : brown : earthy : No data available : ≈ 10.5 : 10 % : > 2000 °F : No data available
9.1. Information on basic physical and chem Physical state Appearance Color Odor threshold pH pH solution concentration Melting point Freezing point Boiling point Flash point Relative evaporation rate (butyl acetate=1)	ical properties : Solid : Granular mixture. : brown : earthy : No data available : ≈ 10.5 : 10 % : > 2000 °F : No data available : No data available
9.1. Information on basic physical and chem Physical state Appearance Color Odor threshold pH pH solution concentration Melting point Freezing point Boiling point Flash point Relative evaporation rate (butyl acetate=1) Flammability (solid, gas)	ical properties : Solid : Granular mixture. : brown : earthy : No data available : ≈ 10.5 : 10 % : > 2000 °F : No data available : No data available
9.1. Information on basic physical and chem Physical state Appearance Color Odor Odor threshold pH pH solution concentration Melting point Freezing point Boiling point Flash point Relative evaporation rate (butyl acetate=1) Flammability (solid, gas) Vapor pressure	ical properties : Solid : Granular mixture. : brown : earthy : No data available : ≈ 10.5 : 10 % : > 2000 °F : No data available : No data available
9.1. Information on basic physical and chem Physical state Appearance Color Odor Odor threshold pH pH solution concentration Melting point Freezing point Boiling point Flash point Relative evaporation rate (butyl acetate=1) Flammability (solid, gas) Vapor pressure Relative vapor density at 20°C	ical properties Solid Granular mixture. brown earthy No data available ≈ 10.5 10 % > 2000 °F No data available No data available
9.1. Information on basic physical and chem Physical state Appearance Color Odor Odor threshold pH pH solution concentration Melting point Freezing point Boiling point Flash point Relative evaporation rate (butyl acetate=1) Flammability (solid, gas) Vapor pressure Relative vapor density at 20°C Relative density	ical properties: Solid: Granular mixture.: brown: earthy: No data available: ≈ 10.5 : 10 %: > 2000 °F: No data available: ≈ 0.9
9.1. Information on basic physical and chem Physical state Appearance Color Odor Odor threshold pH pH solution concentration Melting point Freezing point Boiling point Flash point Relative evaporation rate (butyl acetate=1) Flammability (solid, gas) Vapor pressure Relative vapor density at 20°C Relative density Solubility	ical properties: Solid: Granular mixture.: brown: earthy: No data available: ≈ 10.5 : 10 %: > 2000 °F: No data available: Slightly soluble.
9.1. Information on basic physical and chem Physical state Appearance Color Odor Odor threshold pH pH solution concentration Melting point Freezing point Boiling point Flash point Relative evaporation rate (butyl acetate=1) Flammability (solid, gas) Vapor pressure Relative vapor density at 20°C Relative density Solubility Partition coefficient n-octanol/water (Log Pow)	ical properties: Solid: Granular mixture.: brown: earthy: No data available: ≈ 10.5 : 10 %: > 2000 °F: No data available: No data available
9.1. Information on basic physical and chem Physical state Appearance Color Odor Odor threshold pH pH solution concentration Melting point Freezing point Boiling point Flash point Relative evaporation rate (butyl acetate=1) Flammability (solid, gas) Vapor pressure Relative vapor density at 20°C Relative density Solubility Partition coefficient n-octanol/water (Log Pow) Auto-ignition temperature	ical properties: Solid: Granular mixture.: brown: earthy: No data available: ≈ 10.5 : 10 %: > 2000 °F: No data available: No data available
9.1. Information on basic physical and chem Physical state Appearance Color Odor Odor threshold pH pH solution concentration Melting point Freezing point Freezing point Boiling point Flash point Relative evaporation rate (butyl acetate=1) Flammability (solid, gas) Vapor pressure Relative density Solubility Partition coefficient n-octanol/water (Log Pow) Auto-ignition temperature Decomposition temperature	ical properties: Solid: Granular mixture.: brown: earthy: No data available: ≈ 10.5 : 10 %: > 2000 °F: No data available: No data available
9.1. Information on basic physical and chem Physical state Appearance Color Odor Odor threshold pH pH solution concentration Melting point Freezing point Flash point Relative evaporation rate (butyl acetate=1) Flammability (solid, gas) Vapor pressure Relative vapor density at 20°C Relative density Solubility Partition coefficient n-octanol/water (Log Pow) Auto-ignition temperature Decomposition temperature Viscosity, kinematic	ical properties: Solid: Granular mixture.: brown: earthy: No data available: ≈ 10.5 : 10 %: > 2000 °F: No data available: No data available
9.1. Information on basic physical and chem Physical state Appearance Color Odor Odor threshold pH pH solution concentration Melting point Freezing point Freezing point Boiling point Flash point Relative evaporation rate (butyl acetate=1) Flammability (solid, gas) Vapor pressure Relative density Solubility Partition coefficient n-octanol/water (Log Pow) Auto-ignition temperature Decomposition temperature	ical properties: Solid: Granular mixture.: brown: earthy: No data available: ≈ 10.5 : 10 %: > 2000 °F: No data available: No data available
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9.1. Information on basic physical and chem Physical state Appearance Color Odor Odor threshold pH pH solution concentration Melting point Freezing point Boiling point Flash point Relative evaporation rate (butyl acetate=1) Flammability (solid, gas) Vapor pressure Relative vapor density at 20°C Relative density Solubility Partition coefficient n-octanol/water (Log Pow) Auto-ignition temperature Decomposition temperature Discosity, kinematic Viscosity, dynamic Explosion limits Explosive properties	ical properties : Solid : Granular mixture. : brown : earthy : No data available : ≈ 10.5 : 10 % : > 2000 °F : No data available : No data available
9.1. Information on basic physical and chem Physical state Appearance Color Odor Odor threshold pH pH solution concentration Melting point Freezing point Boiling point Flash point Relative evaporation rate (butyl acetate=1) Flammability (solid, gas) Vapor pressure Relative vapor density at 20°C Relative density Solubility Partition coefficient n-octanol/water (Log Pow) Auto-ignition temperature Decomposition temperature Viscosity, kinematic Viscosity, dynamic Explosion limits Explosive properties	ical properties : Solid : Granular mixture. : brown : earthy : No data available : ≈ 10.5 : 10 % : > 2000 °F : No data available : ≈ 0.9 : Slightly soluble. : No data available : ≈ 0.9 : Slightly soluble. : No data available : No data available

No additional information available

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SECTION 40. Stability and reactivity	
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	
SECTION 11: Toxicological information	
11.1. Information on toxicological effects	
	Not classified
Acute toxicity (dermal) : Acute toxicity (inhalation) :	Not classified Not classified
	Causes skin irritation.
	pH: ≈ 10.5
Calcium Aluminate Cement (65997-16-2)	
рН	≤ 13
cristobalite (14464-46-1)	
pH	6 - 7
quartz (14808-60-7)	
pH	6-7
•	Causes eye irritation.
	pH: ≈ 10.5
Calcium Aluminate Cement (65997-16-2)	
рН	≤ 13
cristobalite (14464-46-1)	
pH	6 – 7
quartz (14808-60-7)	
pH	6-7
	Not classified
Germ cell mutagenicity :	Not classified
o ,	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 : Potential Adverse human health effects and :	Not Applicable Danger of serious damage to health by prolonged exposure through inhalation.
symptoms	banger er conous damage to noam by profonged exposure infodyn mitalation.
Symptoms/effects after inhalation :	Danger of serious damage to health by prolonged exposure through inhalation. May cause cancer by inhalation.
Symptoms/effects after skin contact :	Causes skin irritation.
Symptoms/effects after eye contact :	Causes eye irritation.

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SECTION 12: Ecological information	
12.1. Toxicity	
No additional information available	
12.2. Persistence and degradability	
Rescocast 9 (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
quartz (14808-60-7)	
Persistence and degradability	Not applicable.
Biochemical oxygen demand (BOD) Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable Not applicable
12.3. Bioaccumulative potential	
Rescocast 9 (Mixture)	
Bioaccumulative potential	Not established.
cristobalite (14464-46-1)	No data available
Bioaccumulative potential	No data available.
quartz (14808-60-7)	No data available
Bioaccumulative potential	No data available.
12.4. Mobility in soil	
cristobalite (14464-46-1)	
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	
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	
In accordance with DOT / TDG / IMDG / IATA	
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	
	ed 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	s List)
cristobalite (14464-46-1)	
Listed on the Canadian DSL (Domestic Substances	s List)
EU-Regulations	
No additional information available	
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National regulations	
quartz (14808-60-7)	
Listed on IARC (International Agency for Research on	Cancer)
15.3. US State regulations	
Rescocast 9 (Mixture)	
U.S California - Proposition 65 - Other information	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 - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	Proposition 65 -	U.S California - Proposition 65 - Reproductive Toxicity - Male	 Maximum allowable dose level (MADL)
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
Quartz (14808-60-7)	U.S New Jersey - Right to Know Hazardous Substance List
SECTION 16: Other information	
according to Federal Register / Vol. 77, No.	58 / Monday, March 26, 2012 / Rules and Regulations
Revision date	: 7/1/2024
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-phr	ises	
H315	Causes skin irritation	

H315	Causes skin irritation
H320	Causes eye irritation
H350	May cause cancer
afety Data Sheet (SDS), USA	

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.