Uniform 28 LI - Article

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)
Issue date: 2/7/2017 Revision date: 11/11/2026 Supersedes: 1/20/2025

SECTION 1 Identification

1.1. Product identifier

Product form : Article
Product name : Uniform 28 LI - Article
CAS-No. : Mixture
Product code : 3270, 4484

1.2. Other means of identification

Synonyms : Pre-Cast Refractory Shape

1.3. Recommended use of the chemical and restrictions on use

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

1.4. Supplier's details

Manufacturer
RHI Magnesita
425 South Salem Church Road
York, PA, 17408
United States
T 717-792-3611
Resco_SDS.TDS@rhimagnesita.com - WWW.RescoProducts.com

1.5. Emergency phone number

Emergency number : EMERGENCY ONLY (CHEMTREC) USA & Canada 1-800-424-9300
Outside USA & Canada +1 703-741-5970

SECTION 2 Hazard identification

2.1. Classification of the substance or mixture

GHS-US classification
Not classified

2.2. Label elements

This product meets the definition and criteria for an article according to OSHA 29 CFR 1910.1200 and the EU REACH 1907/2006 Article 3(3) regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

Other hazards which do not result in classification : Pre-cast shape may be heavy and cause pinch and drop hazards, use of gloves and safety shoes should be considered.

2.5. Unknown acute toxicity

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	10 – 30	Skin Irrit. 2, H315 Eye Irrit. 2B, H320
cristobalite	CAS-No.: 14464-46-1	10 – 30	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. Description of necessary 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 : Gently wash with plenty of soap and water.
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.

4.2. Most important symptoms/effects, acute and delayed

Potential adverse human health effects and symptoms : Dust on tear out. Danger of serious damage to health by prolonged exposure through inhalation.

Symptoms/effects after inhalation : Dust on tear out. 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. Indication of immediate medical attention and special treatment needed, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. 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.

5.2. Specific hazards arising from the chemical

Fire hazard : Not flammable.

5.3. Special protective equipment and precautions 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 measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment : Gloves. Safety shoes.

Emergency procedures : Avoid contact with skin and eyes. Do not breathe dust.

For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : On land, sweep or shovel into suitable containers.

6.2. Methods and materials for containment and cleaning up

For containment : Collect spillage.

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

See Section 8. Exposure controls and personal protection.

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 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

8.1. Control parameters

cristobalite (14464-46-1)	
USA - ACGIH® - Threshold Limit Values	
ACGIH® TLV® TWA	0.025 mg/m³ respirable dust
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA	0.05 mg/m³ respirable dust

quartz (14808-60-7)	
USA - ACGIH® - Threshold Limit Values	
ACGIH® TLV® TWA	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	0.05 mg/m³ 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, such as personal protective equipment

Hand protection:

Wear protective gloves.

Skin and body protection:

Safety shoes. Wear suitable protective clothing

Respiratory protection:

Dust on tear out. Wear appropriate mask

Other information:
Do not eat, drink or smoke during use.

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	:	Solid
Appearance	:	Solid in various shapes.
Colour	:	light brown
Odour	:	odourless
Odour threshold	:	No data available
pH	:	No data available
Melting point	:	> 2000 °F
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Flammability (solid, gas)	:	Not flammable.
Vapour pressure	:	No data available
Relative vapour density at 20°C	:	No data available
Relative density	:	≈ 1.7
Solubility	:	Insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Explosive limits	:	No data available
Particle characteristics	:	No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

None known.

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
Skin corrosion/irritation	:	Not classified

Calcium Aluminate Cement (65997-16-2)	
pH	≤ 13

cristobalite (14464-46-1)	
pH	6 – 7

quartz (14808-60-7)	
pH	6 – 7

Serious eye damage/irritation : Not classified

Calcium Aluminate Cement (65997-16-2)	
pH	≤ 13

cristobalite (14464-46-1)	
pH	6 – 7

quartz (14808-60-7)	
pH	6 – 7

Respiratory or skin sensitisation : 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 : Not classified

Potential adverse human health effects and symptoms : Dust on tear out. Danger of serious damage to health by prolonged exposure through inhalation.

Symptoms/effects after inhalation : Dust on tear out. 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.

SECTION 12 Ecological information

12.1. Ecotoxicity

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

12.2. Persistence and degradability

Uniform 28 LI - Article (Mixture)	
Persistence and degradability	Not established.

Calcium Aluminate Cement (65997-16-2)	
Persistence and degradability	Rapidly degradable

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.

quartz (14808-60-7)	
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

12.3. Bioaccumulative potential

Uniform 28 LI - Article (Mixture)	
Bioaccumulative potential	Not established.

cristobalite (14464-46-1)	
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.

12.5. Other adverse effects

Ozone : Not classified
Effect on global warming : None known
Fluorinated greenhouse gases : No

Other information : No other effects known.

SECTION 13 Disposal considerations

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

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. 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

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. State regulations

Uniform 28 LI - Article (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	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

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

Revision date : 11/11/2026

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

Full text of hazard classes and H-statements	
H315	Causes skin irritation
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, RHI Magnesita 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.