



# Uniform 80CLC 102 with Metallic Fiber Article

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Issue date: 5/6/2016 Revision date: 6/11/2025 Supersedes: 5/23/2022

### SECTION 1: Identification

#### 1.1. Identification

Product form : Article  
Product name : Uniform 80CLC 102 with Metallic Fiber Article  
CAS-No. : Mixture  
Product code : 3250, 3253, 3255, 3453, 3605, 3971, 4052, 4057  
Synonyms : Pre-Cast Refractory Shape

#### 1.2. Recommended use and restrictions on use

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

#### 1.3. Supplier

##### Manufacturer

RHI Magnesita  
One Robinson Plaza, Suite 300  
6600 Steubenville Pike  
Pittsburgh, PA, 15205  
United States  
T 412-494-4491

[Resco\\_SDS.TDS@rhimagnesita.com](mailto:Resco_SDS.TDS@rhimagnesita.com) - [WWW.RescoProducts.com](http://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

Not classified

#### 2.2. GHS Label elements, including precautionary statements

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. Other hazards which do not result in classification

Other hazards which do not result in classification : Note: This product contains metallic fiber, hand protection required. Pre-cast shape may be heavy and cause pinch and drop hazards, use of gloves and safety shoes should be considered.

#### 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
aluminum 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.  
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 and effects (acute and delayed)

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

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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.
Symptoms/effects after ingestion	: No data available.

### 4.3. Immediate medical attention and special treatment, 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.
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### 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

#### 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

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: On land, sweep or shovel into suitable containers.

### 6.2. Environmental precautions

No additional information available

### 6.3. Methods and material 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.

### 6.4. Reference to other sections

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 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

### 8.1. Control parameters

#### cristobalite (14464-46-1)

##### USA - ACGIH - Occupational Exposure Limits

ACGIH® TLV® TWA	0.025 mg/m³ respirable dust
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##### USA - OSHA - Occupational Exposure Limits

OSHA PEL TWA	0.05 mg/m³ respirable dust
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#### aluminum oxide, non-fibrous (1344-28-1)

##### USA - ACGIH - Occupational Exposure Limits

ACGIH® TLV® TWA	1 mg/m³ respirable dust
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#### quartz (14808-60-7)

##### USA - ACGIH - Occupational Exposure Limits

ACGIH® TLV® TWA	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	0.05 mg/m³ respirable dust

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### quartz (14808-60-7)

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

#### 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. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Solid in various shapes.
Colour	: Grey
Odour	: odourless
Odour threshold	: No data available
pH	: No data available
Melting point	: > 3000 °F
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Not flammable.
Vapour pressure	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: ≈ 2.7
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	: Not Applicable
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

### 9.2. Other information

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

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### 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

#### aluminum oxide, non-fibrous (1344-28-1)

LD50 oral rat	> 15900 mg/kg bodyweight (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))

Skin corrosion/irritation : Not classified

#### Calcium Aluminate Cement (65997-16-2)

pH	≤ 13
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#### cristobalite (14464-46-1)

pH	6 – 7
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#### aluminum oxide, non-fibrous (1344-28-1)

pH	9 – 10.5 (aqueous suspension, 33 %)
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#### quartz (14808-60-7)

pH	6 – 7
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Serious eye damage/irritation : Not classified

#### Calcium Aluminate Cement (65997-16-2)

pH	≤ 13
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#### cristobalite (14464-46-1)

pH	6 – 7
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#### aluminum oxide, non-fibrous (1344-28-1)

pH	9 – 10.5 (aqueous suspension, 33 %)
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#### quartz (14808-60-7)

pH	6 – 7
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Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified

#### quartz (14808-60-7)

IARC group	1 - Carcinogenic to humans
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Reproductive toxicity : Not classified  
STOT-single exposure : Not classified  
STOT-repeated exposure : Not classified  
Aspiration hazard : Not classified  
Viscosity, kinematic : Not Applicable

#### aluminum oxide, non-fibrous (1344-28-1)

Viscosity, kinematic	Not applicable (solid)
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Potential adverse human health effects and symptoms : 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.  
Symptoms/effects after ingestion : No data available.

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### SECTION 12: Ecological information

#### 12.1. Toxicity

##### aluminum 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 with Metallic Fiber Article (Mixture)

Persistence and degradability	Not established.
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##### Calcium Aluminate Cement (65997-16-2)

Persistence and degradability	Rapidly degradable
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##### cristobalite (14464-46-1)

Persistence and degradability	Mineral, Not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

##### aluminum 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

##### Uniform 80CLC 102 with Metallic Fiber Article (Mixture)

Bioaccumulative potential	Not established.
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##### cristobalite (14464-46-1)

Bioaccumulative potential	No data available.
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##### aluminum oxide, non-fibrous (1344-28-1)

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

Bioaccumulative potential	No data available.
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#### 12.4. Mobility in soil

##### cristobalite (14464-46-1)

Ecology - soil	No data available.
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##### aluminum oxide, non-fibrous (1344-28-1)

Surface tension	Not applicable (water solubility < 1 mg/l)
Ecology - soil	No data available.

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### 12.5. Other adverse effects

Effect on 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.

## 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

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

### aluminum oxide, non-fibrous (1344-28-1)

Not subject to reporting requirements 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.
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### 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)

### aluminum 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 with Metallic Fiber 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 <a href="http://WWW.P65Warnings.ca.gov">WWW.P65Warnings.ca.gov</a>
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### 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		

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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
aluminum 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 : 6/11/2025

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

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