



# Uniform 85LC with Metallic Fiber

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Issue date: 9/9/2022 Revision date: 9/9/2022 Supersedes: 7/29/2019

### SECTION 1: Identification

#### 1.1. Identification

Product form : Article  
Product name : Uniform 85LC with Metallic Fiber  
CAS-No. : Mixture  
Product code : 3257, 4526, 4528, 4561, 4618  
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

Resco Products, Inc.  
One Robinson Plaza, Suite 300  
6600 Steubenville Pike  
Pittsburgh, PA, 15205  
United States  
412-494-4491  
[SDS@RescoProducts.com](mailto:SDS@RescoProducts.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)

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
Calcium Aluminate Cement	CAS-No.: 65997-16-2	5 – 10	Skin Irrit. 2, H315 Eye Irrit. 2B, H320
quartz	CAS-No.: 14808-60-7	1 – 5	Carc. 1A, H350
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 : Based on available data, the classification criteria are not met.

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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 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.

### 5.3. Special protective equipment and precautions for fire-fighters

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

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. Minimize generation of dust.

### 6.4. Reference to other sections

See Heading 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

#### Uniform 85LC with Metallic Fiber (Mixture)

No additional information available

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

No additional information available

#### crystalobalite (14464-46-1)

#### USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA	0.025 mg/m <sup>3</sup> respirable dust
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#### USA - OSHA - Occupational Exposure Limits

OSHA PEL (TWA) [1]	0.05 mg/m <sup>3</sup> respirable dust
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aluminium oxide, non-fibrous (1344-28-1)	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH OEL TWA	1 mg/m <sup>3</sup> respirable dust
<b>quartz (14808-60-7)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
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)
<b>USA - OSHA - Occupational Exposure Limits</b>	
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 properties

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

Physical state	: Solid
Appearance	: Solid in various shapes.
Color	: Light gray
Odor	: odorless
Odor threshold	: Not applicable
pH	: No data available
Melting point	: > 2500 °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	: Not Applicable
Vapor pressure at 50 °C	: Not Applicable
Relative vapor density at 20 °C	: No data available
Relative density	: ≈ 2.6
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	: No data available
Oxidizing properties	: No data available

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### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 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)

LD50 oral rat	> 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))

Skin corrosion/irritation : Not classified

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

pH ≤ 13

#### crystalite (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

Serious eye damage/irritation : Not classified

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

pH ≤ 13

#### crystalite (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 : Not classified

Viscosity, kinematic : Not Applicable

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

Viscosity, kinematic : Not applicable (solid)

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

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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.

### SECTION 12: Ecological information

#### 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 85LC with Metallic Fiber (Mixture)

Persistence and degradability	Not established.
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##### crystalite (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

##### Uniform 85LC with Metallic Fiber (Mixture)

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

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

##### crystalite (14464-46-1)

Ecology - soil	No data available.
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##### 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

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)

Not regulated

#### Transportation of Dangerous Goods

Not regulated

#### Transport by sea

Not regulated

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### 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

#### 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)

##### crystalite (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 85LC with Metallic Fiber (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](http://WWW.P65Warnings.ca.gov)

##### crystalite (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

Crystalite (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

: 09/09/2022

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-phrases

H315	Causes skin irritation
H320	Causes eye irritation
H350	May cause cancer

Safety Data Sheet (SDS), USA

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