



# Uniform 98LCXC

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Issue date: 2/14/2017 Revision date: 6/18/2025 Supersedes: 6/6/2022

### SECTION 1: Identification

#### 1.1. Identification

Product form : Article  
Product name : Uniform 98LCXC  
CAS-No. : Mixture  
Product code : 3456  
Synonyms : Pre-Cast Refractory Shape  
Other means of identification : Alumina-Silicate Pre-Cast Shape

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

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

#### 1.3. Supplier

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 : 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	75 – 95	Not classified
Calcium Aluminate Cement	CAS-No.: 65997-16-2	5 – 10	Skin Irrit. 2, H315 Eye Irrit. 2B, H320
crystalite	CAS-No.: 14464-46-1	0.1 – 0.5	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 : Dust on tear out. Danger of serious damage to health by prolonged exposure through inhalation.

# Uniform 98LCXC

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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. 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

Emergency procedures	: Avoid contact with skin and eyes. Do not breathe dust.
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#### 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/m <sup>3</sup> respirable dust
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##### USA - OSHA - Occupational Exposure Limits

OSHA PEL TWA	0.05 mg/m <sup>3</sup> respirable dust
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#### aluminum oxide, non-fibrous (1344-28-1)

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

ACGIH® TLV® TWA	1 mg/m <sup>3</sup> respirable dust
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### 8.2. Appropriate engineering controls

Appropriate engineering controls	: Dust on tear out. Provide adequate ventilation to minimize dust concentrations.
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### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Wear protective gloves.

# Uniform 98LCXC

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 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	: white
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	: ≈ 2.8
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

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

#### 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))
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# Uniform 98LCXC

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>aluminum oxide, non-fibrous (1344-28-1)</b>	
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
<b>Calcium Aluminate Cement (65997-16-2)</b>	
pH	≤ 13
<b>crystalite (14464-46-1)</b>	
pH	6 – 7
<b>aluminum oxide, non-fibrous (1344-28-1)</b>	
pH	9 – 10.5 (aqueous suspension, 33 %)
Serious eye damage/irritation	: Not classified
<b>Calcium Aluminate Cement (65997-16-2)</b>	
pH	≤ 13
<b>crystalite (14464-46-1)</b>	
pH	6 – 7
<b>aluminum oxide, non-fibrous (1344-28-1)</b>	
pH	9 – 10.5 (aqueous suspension, 33 %)
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: Not Applicable
<b>aluminum oxide, non-fibrous (1344-28-1)</b>	
Viscosity, kinematic	Not applicable (solid)
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.
<b>SECTION 12: Ecological information</b>	
<b>12.1. Toxicity</b>	
<b>aluminum oxide, non-fibrous (1344-28-1)</b>	
LC50 - Fish [1]	> 100 mg/l (96 h, Salmo trutta, Literature study)
EC50 - Crustacea [1]	> 100 mg/l (48 h, Daphnia magna, Literature study)
<b>12.2. Persistence and degradability</b>	
<b>Uniform 98LCXC (Mixture)</b>	
Persistence and degradability	Not established.
<b>Calcium Aluminate Cement (65997-16-2)</b>	
Persistence and degradability	Rapidly degradable
<b>crystalite (14464-46-1)</b>	
Persistence and degradability	Mineral, Not applicable.
Chemical oxygen demand (COD)	Not applicable

# Uniform 98LCXC

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>crystalobalite (14464-46-1)</b>	
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
<b>aluminum oxide, non-fibrous (1344-28-1)</b>	
Persistence and degradability	Not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
<b>12.3. Bioaccumulative potential</b>	
<b>Uniform 98LCXC (Mixture)</b>	
Bioaccumulative potential	Not established.
<b>crystalobalite (14464-46-1)</b>	
Bioaccumulative potential	No data available.
<b>aluminum oxide, non-fibrous (1344-28-1)</b>	
Bioaccumulative potential	No data available.
<b>12.4. Mobility in soil</b>	
<b>crystalobalite (14464-46-1)</b>	
Ecology - soil	No data available.
<b>aluminum oxide, non-fibrous (1344-28-1)</b>	
Surface tension	Not applicable (water solubility < 1 mg/l)
Ecology - soil	No data available.
<b>12.5. Other adverse effects</b>	
Effect on global warming	: None known
Other information	: No other effects known.
<b>SECTION 13: Disposal considerations</b>	
<b>13.1. Disposal methods</b>	
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
<b>SECTION 14: Transport information</b>	
In accordance with DOT / TDG / IMDG / IATA <b>Department of Transportation (DOT)</b> In accordance with DOT Not regulated <b>Transportation of Dangerous Goods</b> Not regulated <b>Transport by sea</b> Not regulated <b>Air transport</b> Not regulated	
<b>SECTION 15: Regulatory information</b>	
<b>15.1. US Federal regulations</b>	
All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory	
<b>aluminum oxide, non-fibrous (1344-28-1)</b>	
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.

# Uniform 98LCXC

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 15.2. International regulations

#### CANADA

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

Listed on the Canadian DSL (Domestic Substances List)

##### crystalobalite (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

No additional information available

### 15.3. US State regulations

#### Uniform 98LCXC (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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#### crystalobalite (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		

#### Component

crystalobalite(14464-46-1)

#### State or local regulations

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

### SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 6/18/2025

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

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.