



MightyFibre M-HCA

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)
Issue date: 6/5/2017 Revision date: 1/14/2026 Supersedes: 5/12/2023

SECTION 1 Identification

1.1. Product identifier

Product form : Article
Product name : MightyFibre M-HCA
Product code : 9945

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 (CHEMREC) 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. Note: This product contains metallic fiber, hand protection required.

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
aluminium oxide, non-fibrous	CAS-No.: 1344-28-1	30 – 60	Not classified
Calcium Aluminate Cement	CAS-No.: 65997-16-2	10 – 30	Skin Irrit. 2, H315 Eye Irrit. 2B, H320
cristobalite	CAS-No.: 14464-46-1	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 : No hazards which require special first aid measures.
First-aid measures after inhalation : Inhalation unlikely. Allow affected person to breathe fresh air.
First-aid measures after skin contact : Not applicable.
First-aid measures after eye contact : Direct eye contact is unlikely. Rinse cautiously with water for several minutes.
First-aid measures after ingestion : Ingestion unlikely. Rinse mouth.

4.2. Most important symptoms/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 eye contact	: Eye irritation.
Symptoms/effects after ingestion	: No data available.

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	: No unsuitable extinguishing media known.

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.
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SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment	: Gloves. Safety shoes.
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For emergency responders

Protective equipment	: Use personal protective equipment as required.
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6.2. Methods and materials for containment and cleaning up

Methods for cleaning up	: Collect spillage.
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For further information refer to section 8: "Exposure controls/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.
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.
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SECTION 8 Exposure controls/personal protection

8.1. Control parameters

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

USA - ACGIH - Occupational Exposure Limits

ACGIH® TLV® TWA	1 mg/m ³ respirable dust
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cristobalite (14464-46-1)

USA - ACGIH - Occupational Exposure Limits

ACGIH® TLV® TWA	0.025 mg/m ³ respirable dust
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USA - OSHA - Occupational Exposure Limits

OSHA PEL TWA	0.05 mg/m ³ 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, such as personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves.

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Safety shoes. Wear suitable protective clothing

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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.
Color	:	Gray
Odor	:	None
Odor 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
Flammability (solid, gas)	:	Non flammable.
Vapor pressure	:	No data available
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	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Explosion 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.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

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

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

pH	9 – 10.5 (aqueous suspension, 33 %)
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Calcium Aluminate Cement (65997-16-2)	
pH	≤ 13
cristobalite (14464-46-1)	
pH	6 – 7
Serious eye damage/irritation	: Not classified
aluminium oxide, non-fibrous (1344-28-1)	
pH	9 – 10.5 (aqueous suspension, 33 %)
Calcium Aluminate Cement (65997-16-2)	
pH	≤ 13
cristobalite (14464-46-1)	
pH	6 – 7
Respiratory or skin sensitization	: 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
aluminium oxide, non-fibrous (1344-28-1)	
Viscosity, kinematic	Not applicable (solid)
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 eye contact	: Eye irritation.
Symptoms/effects after ingestion	: No data available.
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
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	
MightyFibre M-HCA	
Persistence and degradability	Rapidly degradable
aluminium oxide, non-fibrous (1344-28-1)	
Persistence and degradability	Not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
Calcium Aluminate Cement (65997-16-2)	
Persistence and degradability	Rapidly degradable
cristobalite (14464-46-1)	
Persistence and degradability	Mineral, Not applicable.

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cristobalite (14464-46-1)								
Chemical oxygen demand (COD)	Not applicable							
ThOD	Not applicable							
BOD (% of ThOD)	Not applicable							
12.3. Bioaccumulative potential								
aluminium oxide, non-fibrous (1344-28-1)								
Bioaccumulative potential	No data available.							
cristobalite (14464-46-1)								
Bioaccumulative potential	No data available.							
12.4. Mobility in soil								
aluminium oxide, non-fibrous (1344-28-1)								
Surface tension	Not applicable (water solubility < 1 mg/l)							
Ecology - soil	No data available.							
cristobalite (14464-46-1)								
Ecology - soil	No data available.							
12.5. Other adverse effects								
Ozone	: Not classified							
Fluorinated greenhouse gases	: No							
SECTION 13 Disposal considerations								
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.							
SECTION 14 Transport information								
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								
Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):								
Name		CAS-No.	Listing	Commercial status				
aluminium oxide, non-fibrous		1344-28-1	Exempted	Active				
Calcium Aluminate Cement		65997-16-2	Present	Active				
cristobalite		14464-46-1	Present	Active				
aluminium 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.							
15.2. International regulations								
CANADA								
aluminium oxide, non-fibrous (1344-28-1)								
Listed on the Canadian DSL (Domestic Substances List)								
Calcium Aluminate Cement (65997-16-2)								
Listed on the Canadian DSL (Domestic Substances List)								

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cristobalite (14464-46-1)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. State regulations

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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
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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		

Component	State or local regulations
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
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

SECTION 16 Other information

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

Revision date

: 1/14/2026

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: 6/5/2017

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 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.