

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 10/26/2016 Revision date: 2/7/2025 Supersedes: 3/14/2022

SECTION 1: Identification

1.1. Identification

Product form : Article
Product name : Multerm 780
CAS-No. : Mixture
Product code : 2802

Synonyms : Alumina-Silicate Refractory 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

SDS@RescoProducts.com - 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 : The fired 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
cristobalite	CAS-No.: 14464-46-1	20 – 50	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
Symptoms/effects after inhalation

: Based on available data, the classification criteria are not met.

: 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.

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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 : 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.

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 OEL TWA 0.025 mg/m³ respirable dust

USA - OSHA - Occupational Exposure Limits

OSHA PEL TWA 0.05 mg/m³ respirable dust

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

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA 1 mg/m³ respirable dust

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

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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. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Solid in various shapes.

Colour : Off-white brown Odour : odourless

Odour threshold : No data available pH : No data available Melting point : > 2500 °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 : ≈ 2.3

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 Not Applicable Viscosity, kinematic 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))
	> 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

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pH 6 - 7 aluminum oxide, non-fibrous (1344-28-1) pH 9 - 10.5 (aqueous suspension, 33 %) Serious eye damage/irritation : Not classified cristobalite (14464-46-1) pH 6 - 7 aluminum oxide, non-fibrous (1344-28-1) pH 9 - 10.5 (aqueous suspension, 33 %) Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified STOT-single exposure : Not classified STOT-repeated ex					
aluminum oxide, non-fibrous (1344-28-1) pH	cristobalite (14464-46-1)				
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Chemical oxygen demand (COD) Not applicable ThOD Not applicable	cristobalite (14464-46-1)				
ThOD Not applicable	Persistence and degradability	Mineral, Not applicable.			
	Chemical oxygen demand (COD)	Not applicable			
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	BOD (% of ThOD)	Not applicable			
aluminum oxide, non-fibrous (1344-28-1)					
Persistence and degradability Not applicable.	Persistence and degradability	Not applicable.			
Chemical oxygen demand (COD) Not applicable	Chamical avugan damand (COD)	Not applicable			
ThOD Not applicable	Chemical oxygen demand (COD)	+			
12.3. Bioaccumulative potential		Not applicable			
Multerm 780 (Mixture)	ThOD	Not applicable			
Bioaccumulative potential Not established.	ThOD 12.3. Bioaccumulative potential	Not applicable			

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cristobalite (14464-46-1)		
Bioaccumulative potential No data available.		
aluminum oxide, non-fibrous (1344-28-1)		
Bioaccumulative potential No data available.		
12.4. Mobility in soil		
cristobalite (14464-46-1)		
Ecology - soil No data available.		
aluminum 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 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: 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

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

No additional information available

15.3. US State regulations

Multerm 780 (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

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cristobalite (14464-46-	1)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	Proposition 65 -	Proposition 65 -	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
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

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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
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.

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