Niterm 500

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)
Issue date: 3/29/2016 Revision date: 3/25/2026 Supersedes: 6/7/2023

SECTION 1 Identification

1.1. Product identifier

Product form : Article
Product name : Niterm 500
CAS-No. : Mixture
Product code : 2805

1.2. Other means of identification

Other means of identification : Fired Nitride Bonded Silicon Carbide

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

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 (CHEMTREC) 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. No labeling obligation.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

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
silicon carbide	CAS-No.: 409-21-2	60 – 80	Carc. 1B, H350
siliconnitride	CAS-No.: 12033-89-5	10 – 30	Not classified
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 : 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.

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.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire with normal precautions from a reasonable distance.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No additional information available

For emergency responders

Protective equipment : Use personal protective equipment as required.

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up : Collect spillage.

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Hygiene measures : Always wash hands after handling the product.

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.

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
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA	0.05 mg/m³ respirable dust

silicon carbide (409-21-2)

USA - ACGIH - Occupational Exposure Limits	
ACGIH® TLV® TWA	3 mg/m³ (Silicon carbide, nonfibrous; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction. The value is for particulate matter containing no asbestos and < 1% crystalline silica.

siliconnitride (12033-89-5)

USA - ACGIH - Occupational Exposure Limits	
ACGIH® TLV® TWA	3 mg/m³ (Respirable fraction) 10 mg/m³ (Inhalable fraction)

8.2. Appropriate engineering controls

Appropriate engineering controls : Dust on tear out. Provide adequate ventilation to minimize dust concentrations.

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

Respiratory protection:
Dust on tear out. Wear appropriate mask

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	:	Solid
Appearance	:	Shape.
Color	:	Light gray
Odor	:	None
Odor 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
Flammability (solid, gas)	:	Not 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

silicon carbide (409-21-2)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal)

Skin corrosion/irritation : Not classified

cristobalite (14464-46-1)	
pH	6 – 7

silicon carbide (409-21-2)	
pH	Not applicable (non-soluble in water), CIPAC MT 75: Determination of pH

Serious eye damage/irritation : Not classified

cristobalite (14464-46-1)	
pH	6 – 7

silicon carbide (409-21-2)	
pH	Not applicable (non-soluble in water), CIPAC MT 75: Determination of pH

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

silicon carbide (409-21-2)	
IARC group	2A - Probably carcinogenic to humans

Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

silicon carbide (409-21-2)	
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.

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

silicon carbide (409-21-2)	
ErC50 algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 48 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)

12.2. Persistence and degradability

Niterm 500 (Mixture)	
Persistence and degradability	Not established.

cristobalite (14464-46-1)	
Persistence and degradability	Mineral, Not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

silicon carbide (409-21-2)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

siliconnitride (12033-89-5)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable

siliconnitride (12033-89-5)	
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

cristobalite (14464-46-1)	
Bioaccumulative potential	No data available.

silicon carbide (409-21-2)	
Bioaccumulative potential	Not bioaccumulative.

siliconnitride (12033-89-5)	
Bioaccumulative potential	Bioaccumulation: not applicable.

12.4. Mobility in soil

cristobalite (14464-46-1)	
Ecology - soil	No data available.

silicon carbide (409-21-2)	
Surface tension	No data available in the literature
Ecology - soil	Low potential for adsorption in soil.

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

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. 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

15.2. International regulations

CANADA

cristobalite (14464-46-1)
Listed on the Canadian DSL (Domestic Substances List)

silicon carbide (409-21-2)
Listed on the Canadian DSL (Domestic Substances List)

siliconnitride (12033-89-5)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations
No additional information available

National regulations

silicon carbide (409-21-2)
Listed on IARC (International Agency for Research on Cancer)

15.3. State regulations

Niterm 500 (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

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
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
silicon carbide(409-21-2)	U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16 Other information

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

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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	
H350	May cause cancer.

Safety Data Sheet (SDS), USA

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