

SDS No. MW0005
Date of Issue: June 1998

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1. IDENTIFICATION

- (a) Product identifier used on the label **MaxRigidizer**
- (b) Other means of identification **MaxRigidizer (2300°F, 2700°F)**
- (c) Recommended use of the chemical and restrictions on use
Primary Use:
Is used for applications with high velocity or flame impingement on ceramic wools. Rigidizer can be applied to the surface of Blanket, Modules or other high temperature insulations by spraying or brushing this to hardening agent for Fiber and Ceramic Products.
- (d) Name, address, and telephone number
- | | Nutec Inc. | Nutec México |
|--|-----------------------------------|-------------------------------|
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- FOR NUTEC PRODUCT STEWARDSHIP ASSISTANCE CALL
+1 (877) 318-2430
- For additional information or SDSs, visit our web page,
<http://www.nutec.com> or call at
+1 (877) 318-2430
- (e) Emergency phone number FOR A CHEMICAL EMERGENCY,
CALL +1 (877) 318-2430 Emergency number

2. HAZARDS IDENTIFICATION

- a) Classification of the chemical in accordance with paragraph (d) of §1910.1200
- Under OSHA HCS 2012, this product is classified as Category 2 skin & eyes irritant.
- b) Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of §1910.1200
- c) Hazard Pictogram

**Signal Word**

Warning

Hazard Statements

Causes mild skin irritation

Causes mild eye irritation

May cause respiratory irritation

Precautionary statements

Do not handle until all safety instructions have been read and understood.

Wear protective gloves, protective clothing, eye protection, and face protection.

If concerned about exposure, get medical advice

Dispose of waste in accordance with local, state and federal regulations.

Emergency Overview

Dust/mist generated from this product may aggravate existing chronic lung conditions such as bronchitis, emphysema and asthma.

d) Describe any hazards not otherwise classified that have been identified during the classification process**e) Mixture Rule**

Not applicable.

3. COMPOSITION / INFORMATION ON INGREDIENTS**a) Composition table**

| COMPONENTS | CAS NUMBER | % BY WEIGHT |
|--------------------------|------------|-------------|
| Silica, Amorphous | 7631-86-9 | 10 - 30 |
| Aluminum Oxide Hydroxide | 24623-77-6 | 1 - 15 |
| Water | 7732-18-5 | 25 - 70 |

b) Common Name

(See Section 8 "Exposure Controls / Personal Protection" for exposure guidelines)

c) Impurities and Stabilizing Additives

Not applicable.

4. FIRST AID MEASURES**a) Description of necessary measures subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion****Eyes**

In case of eye contact flush abundantly with water; have eye bath available. Do not rub eyes.

Skin

This compound is not likely to be hazardous by skin contact but washing the skin with soap and water after use is advisable.

Respiratory Tract

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. If respiration or pulse has stopped, have a trained person administer Basic Life Support (Cardio-Pulmonary Resuscitation/Automatic External Defibrillator) and CALL FOR EMERGENCY SERVICES IMMEDIATELY.

Gastrointestinal

No specific intervention is indicated as the compound is not likely to be hazardous by ingestion. However, if symptoms occur, consult a physician.

Indication of immediate medical attention and special treatment needed, if necessary

5. FIRE FIGHTING MEASURES**a) Suitable (and unsuitable) extinguishing media**

Use extinguishing agent suitable for surrounding combustible materials.

b) Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):

Non-combustible product, class of reaction to fire is zero.
Packaging and surrounding materials may be combustible

Specific extinguishing methods:

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

a) Personal precautions, protective equipment, and emergency procedures

Refer to protective measures listed in sections 7 and 8.

b) Methods and materials for containment and cleaning up

Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contains material to ensure runoff does not reach a waterway.

EMPTY CONTAINERS

Product packaging may contain residue. Do not reuse.

7. HANDLING AND STORAGE

a) Precautions for safe handling

Wash hands thoroughly after handling. Use only with adequate ventilation.

b) Conditions for safe storage, including any incompatibilities

Keep out of reach of children. Keep container tightly closed.

Keep in properly labelled containers.

Store in an area that is dry, well-ventilated; away from compatible materials (see Section 10. Stability and Reactivity).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

(a) OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available

| <u>COMPONENT</u> | <u>OSHA PEL</u> | <u>ACGIH TLV</u> | <u>MANUFACTURER'S REG</u> |
|------------------|-----------------|------------------|---------------------------|
|------------------|-----------------|------------------|---------------------------|

| | | | |
|---|--|----------------------|------|
| Silica, Amorphous | 80 mg/m ³ / %SiO ₂ or 20 mppcf | 10 mg/m ³ | None |
| Aluminum Oxide Hydroxide | 15 mg/m ³ , total dust 5 mg/m ³ , respirable dust | 10 mg/m ³ | None |
| OTHER OCCUPATIONAL EXPOSURE LEVELS (OEL) Industrial hygiene standards and occupational exposure limits vary between countries and local jurisdictions. Check which exposure levels apply to your facility and comply with local regulations. If no regulatory dust or other standards apply, a qualified industrial hygienist can assist with specific workplace evaluation including recommendations for respiratory protection. | | | |

(b) Appropriate engineering controls

Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures:
 Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

(c) Individual protection measures, such as personal protective equipment

Eye protection:

Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.
 Safety glasses

Hand protection:

Wear protective gloves. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection:

Wear suitable protective clothing.

Respiratory protection:

No personal respiratory protective equipment normally required.

Hygiene measures:

Wash hands before breaks and immediately after handling the product. Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.

HUMAN EXPOSURE CHARACTERIZATION:

Based on our recommended product application and personal protective equipment, the potential human exposure is: Low

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|--|----------------|---|----------------|
| (a) Appearance | Liquid | (j) Upper/lower flammability or explosive limits | Not applicable |
| (b) Odor | Odorless | (k) Vapor pressure | Not applicable |
| (c) Odor threshold | Not applicable | (l) Vapor density | Not applicable |
| (d) pH | 6 – 9 ASTM E70 | (m) Relative density | 1.0 - 2.0 |
| (e) Melting point | Not applicable | (n) Solubility | Insoluble |
| (f) Initial boiling point and boiling range | Not applicable | (o) Partition coefficient: n-octanol/water | 100% |
| (g) Flash point | Not applicable | (p) Auto-ignition temperature | Not applicable |
| (h) Evaporation rate | Not applicable | (q) Decomposition temperature | Not applicable |
| (i) Flammability | Not applicable | (r) Viscosity | Not applicable |

10. STABILITY AND REACTIVITY

(a) Reactivity

No data available

(b) Chemical stability

Stable under normal handling and storage conditions

(c) Possibility of hazardous reactions

None.

(d) Conditions to avoid

None know.

(e) Incompatible materials

No known hazardous incompatibility except with materials that react with water

(f) Hazardous decomposition products

No known hazardous decomposition

11. TOXICOLOGICAL INFORMATION**a) Likely routes of exposure**

Inhalation not likely.

Skin likely mode of exposure.

Eyes likely mode of exposure.

Ingestion not likely.

b) Symptoms related to the physical, chemical and toxicological characteristics

Inhalation None.

Skin Irritant. Can cause redness, irritation, inflammation, on prolonged contact.

Eyes Irritant. Can cause redness, irritation.

Ingestion None.

c) Immediate, delayed and chronic effects from short- and long-term exposure

Chronic effects This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

d) Numerical measures of toxicity

Acute oral toxicity:

Rat: > 15,380 mg/kg

Test substance: Product

Acute toxicity estimate: > 5,000 mg/kg

Acute inhalation toxicity:

Acute toxicity estimate: > 40 mg/l

Exposure time: 4 h

Acute dermal toxicity:

Acute toxicity estimate: > 5,000 mg/kg

Skin corrosion/irritation:

Result: 0.3

Method: Draize Test
Test substance: Product

Serious eye damage/eye irritation:
Result: 3.7
Method: Draize Test
Test substance: Product

Respiratory or skin sensitization:
No data available
Carcinogenicity:
No data available
Reproductive effects:
No data available
Germ cell mutagenicity:
No data available
Teratogenicity:
No data available
STOT - single exposure:
No data available
STOT - repeated exposure:
No data available
Aspiration toxicity:
No data available

e) Carcinogenicity

This product does not contain any ingredient designated as probable or suspected human carcinogens by: NTP, IARC, OSHA, ACGIH

12. ECOLOGICAL INFORMATION (Non-mandatory)

- | | |
|---|---|
| (a) Ecotoxicity (aquatic and terrestrial, where available) | No data available |
| (b) Persistence and degradability | These products are insoluble materials that remain stable over time and are chemically identical to inorganic compounds found in the soil and sediment; they remain inert in the natural environment. |
| (c) Bioaccumulative potential | No bioaccumulative potential. |
| (d) Mobility in soil | No mobility in soil. |
| (e) Other adverse effects (such as hazardous to the ozone layer) | No adverse effects of this material on the environment are anticipated. |

13. DISPOSAL CONSIDERATIONS (Non-mandatory)

13.1 Waste Disposal Method

This product is not classified as a hazardous waste according to Federal regulations (40 CFR 261). Check local, regional, state or provincial regulations for applicable requirements for disposal. Any processing, use, alteration or chemical additions to the product, as purchased, may alter the disposal requirements. Under Federal regulations, it is the waste generator's responsibility to properly characterize a waste material, to determine if it is a "hazardous" waste.

13.2 Contaminated packaging Advice

- Any containers or equipment used should be decontaminated immediately after use.
- Empty container should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION (Non-mandatory)

| | |
|--|------------------------|
| (a) UN number | Not Applicable |
| (b) UN proper shipping name | Not Applicable |
| (c) Transport hazard class(es) | Not Applicable |
| (d) Packing group, if applicable | Not Applicable |
| (e) Environmental hazards (e.g., Marine pollutant (Yes/No)) | Not a marine pollutant |
| (f) Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code) | Not Applicable |
| (g) Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises | Not Applicable |

Canadian TDG Hazard Class & PIN: Not regulated.

Not classified as dangerous goods under ADR (road), RID (train) or IMDG (ship).

15. REGULATORY INFORMATION (Non-mandatory)**United States Regulations.**

SARA Title III: Sections 311 and 312 apply (40 CFR 370).

OSHA: Comply with Hazard Communication Standards 29 CFR 1910.1200 and 29 CFR 1926.59 and Respiratory Protection Standards 29 CFR 1910.134 and 29 CFR 1926.103. Components of this product are considered to be hazardous as defined by the OSHA Hazard Communication Standard.

TSCA: All substances contained in this product are listed in the TSCA Chemical Inventory [Section 8(b)]

International Regulations.

Canadian WHMIS: Not a WHMIS controlled product.

Canadian EPA: All substances in this product are listed, as required, on the Domestic Substance List (DSL).

16. OTHER INFORMATION**Initial statement**

Precautionary Measures to be Taken After Service and Upon Removal: Amorphous silica may transform to crystalline silica when subjected to temperatures exceeding 1800° F. Users should observe good industrial hygiene and work practices to reduce employees' exposure when handling after service products.

Devitrification

Precautionary Measures to be Taken After Service and Upon Removal: Amorphous silica may transform to crystalline silica when subjected to temperatures exceeding 1800° F. Users should observe good industrial hygiene and work practices to reduce employees' exposure when handling after service products.

Product Stewardship Program**HMIS HAZARD RATING**

HMIS Acute Health: 1

HMIS Flammable: 0

HMIS Reactivity: 0

HMIS Personal Protective: None

Revision Summary: The address and name of the Company have been updated in section 1, paragraph (d).

Revision Date: Jun/25/2020

SDS Prepared By: Nutec Inc

DISCLAIMER

The information presented herein is presented in good faith and believed to be accurate as of the effective date of this Safety Data Sheet. Employers may use this SDS to supplement other information gathered by them in their efforts to assure the health and safety of their employees and the proper use of the product. This summary of the relevant data reflects professional judgment; employers should note that information perceived to be less relevant has not been included in this SDS. Therefore, given the summary nature of this document, Nutec does not extend any warranty (expressed or implied), assume any responsibility, or make any representation regarding the completeness of this information or its suitability for the purposes envisioned by the user.