

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 09/06/2019

| SECTION 1: Identification  |                                       |                          |                       |
|--|---------------------------------------|--------------------------|-----------------------|
| 1.1. Identification  |                                       |                          |                       |
| Product form : Mit   | xture                                 |                          |                       |
| Trade name : Re  | no NC 96 LA                           |                          |                       |
| Product code : 18  | 6700                                  |                          |                       |
| 1.2. Recommended use and restrictions on us  | ٥                                     |                          |                       |
|  | fractory Applications                 |                          |                       |
|  |                                       |                          |                       |
| 1.3. Supplier  |                                       |                          |                       |
| Reno Refractories, Inc.<br>601 Reno Drive  |                                       |                          |                       |
| P.O. Box 201   |                                       |                          |                       |
| Morris, AL 35116 - United States   |                                       |                          |                       |
| T 205-647-0240 - F 205-647-6854  |                                       |                          |                       |
|  |                                       |                          |                       |
| 1.4. Emergency telephone number  |                                       |                          |                       |
| Emergency number : 1-8   | 800-262-8200 CHEMTREC                 |                          |                       |
| SECTION 2: Hazard(s) identification  |                                       |                          |                       |
| 2.1. Classification of the substance or mixture  |                                       |                          |                       |
| GHS US classification  |                                       |                          |                       |
| Carcinogenicity, Category 1A   | May cause cancer.                     |                          |                       |
| 2.2. GHS Label elements, including precaution  | arv statements                        |                          |                       |
| GHS US labelling   |                                       |                          |                       |
| Hazard pictograms (GHS US) :   |                                       |                          |                       |
| Signal word (GHS US) : Da  | nger                                  |                          |                       |
| ,  | iy cause cancer.                      |                          |                       |
|  | tain special instructions before use. |                          |                       |
| Do not handle until all safety precautions have been read and understood.<br>Wear protective gloves/protective clothing/eye protection/face protection.<br>If exposed or concerned: Get medical advice/attention.<br>Store locked up.<br>Dispose of contents/container to hazardous or special waste collection point, in accordance<br>with local, regional, national and/or international regulation |                                       |                          |                       |
| 2.3. Other hazards which do not result in class  | ification                             |                          |                       |
| No additional information available  |                                       |                          |                       |
| 2.4. Unknown acute toxicity (GHS US)   |                                       |                          |                       |
| Not applicable   |                                       |                          |                       |
| SECTION 3: Composition/information on  | ingredients                           |                          |                       |
| 3.1. Substances  |                                       |                          |                       |
| Not applicable   |                                       |                          |                       |
| 3.2. Mixtures  |                                       |                          |                       |
| Name   | Product identifier                    | %                        | GHS US classification |
| Crystalline silica   | (CAS-No.) 14808-60-7                  | <pre>/0 &lt; 0.298</pre> | Carc. 1A, H350        |
|  |                                       |                          | STOT RE 1, H372       |

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## Full text of hazard classes and H-statements : see section 16

| SECTIO      | DN 4: First-aid measures  |   |  |
|-------------|---|---|--|
| 4.1.        | Description of first aid measures   |   |  |
| First-aid r | neasures general :  | IF exposed or concerned: Get medical advice/attention.  |  |
| First-aid r | irst-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. |   |  |
| First-aid r | neasures after skin contact :   | Wash skin with plenty of water.   |  |
| First-aid r | irst-aid measures after eye contact : Rinse eyes with water as a precaution.                        |   |  |
| First-aid r | neasures after ingestion :  | Call a poison center or a doctor if you feel unwell.  |  |
| 4.2.        | Most important symptoms and effects   | (acute and delayed)   |  |
| No additio  | onal information available  |   |  |
| 4.3.        | Immediate medical attention and spec  | ial treatment, if necessary   |  |
| Treat syn   | nptomatically.  |   |  |
| SECTIO      | ON 5: Fire-fighting measures  |   |  |
| 5.1.        | Suitable (and unsuitable) extinguishin  | g media   |  |
| Suitable e  | extinguishing media :   | Water spray. Dry powder. Foam.  |  |
| 5.2.        | Specific hazards arising from the cher  | nical   |  |
| No additio  | onal information available  |   |  |
| 5.3.        | Special protective equipment and pred   | cautions for fire-fighters  |  |
| Protection  | n during firefighting :   | Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.  |  |
| SECTIO      | ON 6: Accidental release measu  | ires  |  |
| 6.1.        | Personal precautions, protective equi   |   |  |
| 6.1.1.      | For non-emergency personnel   |   |  |
|             |   | Only qualified personnel equipped with suitable protective equipment may intervene.   |  |
| 6.1.2.      | For emergency responders  |   |  |
| Protective  | e equipment :   | Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".   |  |
| 6.2.        | Environmental precautions   |   |  |
| Avoid rele  | ease to the environment. Notify authorities   | if product enters sewers or public waters.  |  |
| 6.3.        | Methods and material for containment  | and cleaning up   |  |
| Methods     |   | Mechanically recover the product. Notify authorities if product enters sewers or public waters.   |  |
| Other info  | prmation  | Dispose of materials or solid residues at an authorized site.   |  |
| 6.4.        | Reference to other sections   |   |  |
| For furthe  | er information refer to section 13.   |   |  |
| SECTIO      | ON 7: Handling and storage  |   |  |
| 7.1.        | Precautions for safe handling   |   |  |
| Precautio   | ns for safe handling :  | Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly. |  |
| Hygiene r   | neasures :  | Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.   |  |
| 7.2.        | Conditions for safe storage, including  | any incompatibilities   |  |
| Storage c   | conditions :  | Store in a well-ventilated place. Keep cool.  |  |
| SECTIO      | ON 8: Exposure controls/persor  | nal protection  |  |

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| Crystalline silica (14808-60-7 | 7)                             |  |
|--------------------------------|--------------------------------|--|
| ACGIH                          | Local name                     | Silica crystaline - quartz   |
| ACGIH                          | ACGIH TWA (mg/m <sup>3</sup> ) | 0.025 mg/m <sup>3</sup> (Respirable fraction)  |
| ACGIH                          | Remark (ACGIH)                 | TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)   |
| ACGIH                          | Regulatory reference           | ACGIH 2018   |
| OSHA                           | Remark (OSHA)                  | Table Z-3. For OSHA PEL (TWA): Use formulas: (250 / (%SiO2+5)) for mppcf and (10 mg/m3 / (%SiO2+2)) for mg/m3. CAS No. source: eCFR Table Z-1. |
| OSHA                           | Regulatory reference (US-OSHA) | OSHA Annotated Table Z-3 Mineral Dusts   |

### 8.2. Appropriate engineering controls

Appropriate engineering controls Environmental exposure controls : Ensure good ventilation of the work station.: Avoid release to the environment.

## 8.3. Individual protection measures/Personal protective equipment

### Hand protection:

Protective gloves

## Eye protection:

Safety glasses

### Skin and body protection:

Wear suitable protective clothing

## **Respiratory protection:**

[In case of inadequate ventilation] wear respiratory protection.

## SECTION 9: Physical and chemical properties

| 9.1. Information on basic physical and     | d chemical properties      |     |
|--|----------------------------|-----|
| Physical state                             | : Solid                    |     |
| Colour                                     | : Colourless to white-grey |     |
| Odour                                      | : Almost odourless         |     |
| Odour threshold                            | : No data available        |     |
| pH   | : No data available        |     |
| Melting point                              | : No data available        |     |
| Freezing point                             | : Not applicable           |     |
| Boiling point                              | : No data available        |     |
| Flash point                                | : Not applicable           |     |
| Relative evaporation rate (butylacetate=1) | : No data available        |     |
| Flammability (solid, gas)                  | : Non flammable.           |     |
| Vapour pressure                            | : No data available        |     |
| Relative vapour density at 20 °C           | : No data available        |     |
| Relative density                           | : 2.53                     |     |
| Solubility                                 | : Water: < 0.1 %           |     |
| Log Pow                                    | : No data available        |     |
| Auto-ignition temperature                  | : Not applicable           |     |
| Decomposition temperature                  | : No data available        |     |
| Viscosity, kinematic                       | : No data available        |     |
| Viscosity, dynamic                         | : No data available        |     |
| Explosive limits                           | : Not applicable           |     |
| Explosive properties                       | : No data available        |     |
| Oxidising properties                       | : No data available        |     |
| 09/06/2019                                 | EN (English)               | 3/6 |

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|---|---|--|
| 9.2. Other information  |   |  |
| VOC content   | : 0 %   |  |
| SECTION 10: Stability and rea   | ctivity   |  |
| 10.1. Reactivity  |   |  |
| The product is non-reactive under norma                                 | al conditions of use, storage and transport.                  |  |
| 10.2. Chemical stability  |   |  |
| Stable under normal conditions.   |   |  |
| 10.3. Possibility of hazardous rea                                      | ctions  |  |
| No dangerous reactions known under no                                   | ormal conditions of use.                                      |  |
| 0.4. Conditions to avoid  |   |  |
| None under recommended storage and handling conditions (see section 7). |   |  |
| 10.5. Incompatible materials  |   |  |
| No additional information available                                     |   |  |
| 10.6. Hazardous decomposition p   | products  |  |
| Under normal conditions of storage and                                  | use, hazardous decomposition products should not be produced. |  |
| SECTION 11: Toxicological inf   | formation   |  |
| 11.1. Information on toxicological                                      | leffects  |  |
| Acute toxicity (oral)   | : Not classified  |  |
| Acute toxicity (dermal)   | : Not classified  |  |
| Acute toxicity (inhalation)   | : Not classified  |  |
| Skin corrosion/irritation   | : Not classified  |  |
| Serious eye damage/irritation   | : Not classified  |  |
| Respiratory or skin sensitisation                                       | : Not classified  |  |
| Germ cell mutagenicity  | : Not classified  |  |
| Carcinogenicity   | · May cause cancer  |  |

| Germ cell mutagenicity          | : Not classified  |
|---------------------------------|---|
| Carcinogenicity                 | : May cause cancer.   |
| Crystalline silica (14808-60-7) |   |
| IARC group                      | 1 - Carcinogenic to humans                                      |
| Reproductive toxicity           | : Not classified  |
| STOT-single exposure            | : Not classified  |
| STOT-repeated exposure          | : Not classified  |
| Crystalline silica (14808-60-7) |   |
| STOT-repeated exposure          | Causes damage to organs through prolonged or repeated exposure. |
| Aspiration hazard               | Not classified  |
| Viscosity, kinematic            | : No data available   |
|                                 |   |

| SECTIO    | ON 12: Ecological information |   |
|-----------|-------------------------------|---|
| 12.1.     | Toxicity                      |   |
| Ecology - | general                       | The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. |

| Crystalline silica (14808-60-7) |                                   |  |
|---------------------------------|-----------------------------------|--|
| Persistence and degradability   | Biodegradability: not applicable. |  |
| Biochemical oxygen demand (BOD) | Not applicable                    |  |
| Chemical oxygen demand (COD)    | Not applicable                    |  |
| ThOD                            | Not applicable                    |  |
| BOD (% of ThOD)                 | Not applicable                    |  |

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| 12.3.    | Bioaccumulative potential   |  |  |
|----------|-----------------------------|--|--|
| No addit | ional information available |  |  |
|          |                             |  |  |
| 12.4.    | Mobility in soil            |  |  |
| No addit | ional information available |  |  |
|          |                             |  |  |
|          |                             |  |  |
| 12.5.    | Other adverse effects       |  |  |
| No addit | ional information available |  |  |

No additional information available

| SECTION 13: Dis | posal considerations |
|-----------------|----------------------|
|                 |                      |

#### 13.1. Disposal methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

## **SECTION 14: Transport information**

## **Department of Transportation (DOT)**

In accordance with DOT

Not applicable

**Transportation of Dangerous Goods** 

Not applicable

#### Transport by sea

Not applicable

Air transport

Not applicable

|  | SECTION | 15: Regula | atory inf | ormation |
|--|---------|------------|-----------|----------|
|--|---------|------------|-----------|----------|

15.1. US Federal regulations

## Crystalline silica (14808-60-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

#### CANADA

Crystalline silica (14808-60-7) Listed on the Canadian DSL (Domestic Substances List)

#### **EU-Regulations**

No additional information available

### **National regulations**

| Crystalline silica (14808-60-7)                              |  |
|--|--|
| Listed on IARC (International Agency for Research on Cancer) |  |
| 15.3 US State regulations                                    |  |

| Component                      | State or local regulations   |
|--------------------------------|--|
| Crystalline silica(14808-60-7) | U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List |

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### **SECTION 16: Other information**

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| Revision date : 09/06/2019 |                       | : 09/06/2019  |
|----------------------------|-----------------------|---|
| Full                       | text of H-statements: |   |
|                            | H350                  | May cause cancer.   |
|                            | H372                  | Causes damage to organs through prolonged or repeated exposure. |

### SDS US (GHS HazCom 2012)

The information provided in the Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of it's publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release. Reno Refractories, Inc. makes no warranties, expressed or implied, with respect to such information, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose or course of performance or usage of trade. User is responsible for determining whether the product is fit for a particular purpose and suitable for user's method of use or application. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.