

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 03/27/2019

### **SECTION 1: Identification**

Identification

Product form : Mixture Trade name Reno Lite 22-35 Product code 132500

Recommended use and restrictions on use

Recommended use : Refractory Applications

Supplier

Reno Refractories, Inc.

601 Reno Drive

P.O. Box 201

Morris, AL 35116 - United States T 205-647-0240 - F 205-647-6854

**Emergency telephone number** 

Emergency number : 1-800-262-8200 CHEMTREC

### SECTION 2: Hazard(s) identification

### Classification of the substance or mixture

#### **GHS-US** classification

Carcinogenicity Category 1A

May cause cancer

Specific target organ toxicity (repeated exposure)

Category 1

Causes damage to organs through prolonged or repeated exposure

#### 2.2. GHS Label elements, including precautionary statements

#### **GHS US labeling**

Hazard pictograms (GHS US)



Signal word (GHS US) : Danger

Hazard statements (GHS US) May cause cancer

Causes damage to organs through prolonged or repeated exposure

Precautionary statements (GHS US) Obtain special instructions before use.

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

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash hands, forearms and face thoroughly after handling. Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

If exposed or concerned: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

Dispose of contents/container to hazardous or special waste collection point, in accordance

with local, regional, national and/or international regulation

### Other hazards which do not result in classification

No additional information available

#### 2.4. **Unknown acute toxicity (GHS US)**

Not applicable

### **SECTION 3: Composition/Information on ingredients**

#### **Substances** 3.1.

Not applicable

#### 3.2. **Mixtures**

03/27/2019 EN (English US) Page 1

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Name                               | Product identifier   | %          | GHS-US classification             |
|------------------------------------|----------------------|------------|-----------------------------------|
| Crystalline silica                 | (CAS-No.) 14808-60-7 | 0.42 - 7.9 | Carc. 1A, H350<br>STOT RE 1, H372 |
| Silica, crystalline – cristobalite | (CAS-No.) 14464-46-1 | 0 - 3.9    | STOT RE 1, H372                   |

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 : IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if

you feel unwell. Get medical advice/attention if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

No additional information available

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### **SECTION 5: Fire-fighting measures**

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

#### 5.2. Specific hazards arising from the chemical

No additional information available

### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not atte

 Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

### 6.1.1. For non-emergency personnel

Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene. Do not

breathe dust/fume/gas/mist/vapors/spray.

### 6.1.2. For emergency responders

Protective 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 release to the environment. Notify authorities if product enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling : Ensu

: 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. Do not breathe dust/fume/gas/mist/vapors/spray.

not broating decriain organization vapor or oping.

Hygiene measures : 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.

03/27/2019 EN (English US) 2/6

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

### SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| Crystalline silica (14808-60-7)                 |                                |  |  |
|---|--------------------------------|--|--|
| ACGIH   | Local name                     | Silica crystaline - quartz   |  |
| ACGIH   | ACGIH TWA (mg/m³)              | 0.025 mg/m³ (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   |  |
| Silica, crystalline – cristobalite (14464-46-1) |                                |  |  |
| ACGIH   | Local name                     | Silica crystaline - cristobalite   |  |
| ACGIH   | ACGIH TWA (mg/m³)              | 0.025 mg/m³ (Respirable fraction)  |  |

| Silica, crystalline – cristobalite (14464-46-1) |                                |   |
|---|--------------------------------|---|
| ACGIH   | Local name                     | Silica crystaline - cristobalite  |
| ACGIH   | ACGIH TWA (mg/m³)              | 0.025 mg/m³ (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 ½ the value calculated from the count or mass formulae for quartz. 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 : Ensure good ventilation of the work station.

Environmental exposure controls : 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:

Wear respiratory protection.

# **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state : Solid
Color : Gray

Odor : Almost odourless
Odor threshold : No data available
pH : No data available
Melting point : No data available
Freezing point : Not applicable

03/27/2019 EN (English US) 3/6

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Boiling point : No data available
Flash point : Not applicable
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : Non flammable.
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available

Relative density : 0.5 - 0.6 Solubility Water: < 0.1 % Log Pow : No data available : Not applicable Auto-ignition temperature Decomposition temperature : No data available : No data available Viscosity, kinematic No data available Viscosity, dynamic **Explosion limits** : Not applicable : No data available Explosive properties Oxidizing properties No data available

#### 9.2. Other information

VOC content : 0 %

### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. 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 products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### **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

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : May cause cancer.

### Crystalline silica (14808-60-7)

IARC group 1 - Carcinogenic to humans

Reproductive toxicity : Not classified Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated : Causes damage to organs through prolonged or repeated exposure.

exposure

03/27/2019 EN (English US) 4/6

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Crystalline silica (14808-60-7)                    |   |
|--|---|
| Specific target organ toxicity – repeated exposure | Causes damage to organs through prolonged or repeated exposure. |
| Silica, crystalline – cristobalite (14464-46-1)    |   |
| Specific target organ toxicity – repeated exposure | Causes damage to organs through prolonged or repeated exposure. |
| Aspiration hazard                                  | : Not classified  |
| Viscosity, kinematic                               | : No data available   |

### **SECTION 12: Ecological information**

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse

effects in the environment.

### 12.2. Persistence and degradability

| 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                    |  |
| Silica, crystalline – cristobalite (14464-46-1) |                                   |  |
| Persistence and degradability                   | Biodegradability: not applicable. |  |
| Chemical oxygen demand (COD)                    | Not applicable                    |  |
| ThOD  | Not applicable                    |  |
| BOD (% of ThOD)                                 | Not applicable                    |  |

### 12.3. Bioaccumulative potential

| Silica, crystalline – cristobalite (14464-46-1) |                         |
|---|-------------------------|
| Bioaccumulative potential                       | No test data available. |

### 12.4. Mobility in soil

| Silica, crystalline – cristobalite (14464-46-1) |   |
|---|---|
| Ecology - soil                                  | No (test)data on mobility of the substance available. |

### 12.5. Other adverse effects

No additional information available

### **SECTION 13: Disposal 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

03/27/2019 EN (English US) 5/6

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### Transport by sea

Not applicable

#### Air transport

Not applicable

### **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

#### Crystalline silica (14808-60-7)

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

### Silica, crystalline - cristobalite (14464-46-1)

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)

#### Silica, crystalline - cristobalite (14464-46-1)

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   |
| Silica, crystalline – 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 Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 03/27/2019

#### Full text of H-phrases:

| 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.

03/27/2019 EN (English US) 6/6