

# Safety Data Sheet

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

Revision date: 02/17/2021

#### **SECTION 1: Identification**

#### 1.1. Identification

Product form : Mixture

Trade name : Reno Cast 80 SiC LC

Product code : 166700

#### 1.2. Recommended use and restrictions on use

Recommended use : Refractory Applications

#### 1.3. Supplier

Reno Refractories, Inc.
601 Reno Drive
P.O. Box 201
Morris, AL 35116 - United States
T 205-647-0240 - F 205-647-6854
sales@r-ref.com - www.renorefractories.com

#### 1.4. Emergency telephone number

Emergency number : 1-800-262-8200 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 precautionary statements

#### **GHS US labeling**

Hazard pictograms (GHS US)



Signal word (GHS US) : Danger

Hazard statements (GHS US) : May cause cancer

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

Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

If exposed or concerned: Get medical advice/attention.

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

with local, regional, national and/or international regulation.

#### 2.3. 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

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
Silicon carbide	(CAS-No.) 409-21-2	75.02 – 91	Carc. 1B, H350
Crystalline silica	(CAS-No.) 14808-60-7	< 0.425	Carc. 1A, H350 STOT RE 1, H372

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

#### **SECTION 4: First-aid measures**

#### **Description of first aid measures**

First-aid measures general : IF exposed or concerned: Get medical advice/attention.

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

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)

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

Treat symptomatically.

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

#### Suitable (and unsuitable) extinguishing media

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

#### Specific hazards arising from the chemical

Hazardous decomposition products in case of

: Toxic fumes may be released.

## Special protective equipment and precautions for fire-fighters

Protection during firefighting

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

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

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

#### 6.1.1. For non-emergency personnel

: Only qualified personnel equipped with suitable protective equipment may intervene. Emergency procedures

#### For emergency responders

: Do not attempt to take action without suitable protective equipment. For further information Protective equipment

refer to section 8: "Exposure controls/personal protection".

#### **Environmental precautions**

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

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

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

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

#### Reference to other sections

For further information refer to section 13.

#### **SECTION 7: Handling and storage**

#### Precautions for safe handling

: Ensure good ventilation of the work station. Obtain special instructions before use. Do not Precautions for safe handling

> 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 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.

### Conditions for safe storage, including any incompatibilities

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

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# SECTION 8: Exposure controls/personal protection

# 8.1. Control parameters

Reno Cast 80 SiC LC	
No additional information available	
Crystalline silica (14808-60-7)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Silica crystaline - quartz
ACGIH TWA (mg/m³)	0.025 mg/m³ (Respirable fraction)
Remark (ACGIH)	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2020
USA - OSHA - Occupational Exposure Limits	
Local name	Quartz (Respirable) (Silica: Crystalline)
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.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts
Silicon carbide (409-21-2)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Silicon carbide
ACGIH TWA (mg/m³)	3 mg/m³ (Respirable fraction. The value is for particulate matter containing no asbestos and < 1% crystalline silica) 0.1 fibers/cm³ (Respirable fibers: length > 5 µm; aspect ratio ≥ 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination) 10 mg/m³ (Inhalable fraction. The value is for particulate matter containing no asbestos and < 1% crystalline silica)
Remark (ACGIH)	Non fibrous = TLV® Basis: URT irr Fibrous (including whiskers) = TLV® Basis: Mesothelioma; cancer. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2020
USA - OSHA - Occupational Exposure Limits	
Local name	Silicon carbide
OSHA PEL (TWA) (mg/m³)	15 mg/m³ (Total dust) 5 mg/m³ (Respirable fraction)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

#### 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.

Personal protective equipment symbol(s):

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

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

Physical state : Solid

Color : Dark grey to black Odor : Almost odorless : No data available Odor threshold : No data available рΗ : No data available Melting point Freezing point : Not applicable Boiling point : No data available Flash point : Not applicable Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Non flammable. : No data available Vapor pressure Relative vapor density at 20 °C : No data available

Relative density : 2.53

: Water: < 0.1 % Solubility Partition coefficient n-octanol/water (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 **Explosion limits** : Not applicable Explosive properties : No data available 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

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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)
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
Serious eye damage/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	
Silicon carbide (409-21-2)	
IARC group	2A - Probably carcinogenic to humans

Reproductive toxicity : Not classified

STOT-single 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

## **SECTION 12: Ecological information**

#### 12.1. Toxicity

STOT-repeated exposure

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

effects in the environment.

: Not classified

### 12.2. Persistence and degradability

Crystalline silica (14808-60-7)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)
Silicon carbide (409-21-2)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

#### 12.3. Bioaccumulative potential

Crystalline silica (14808-60-7)	
Bioaccumulative potential No bioaccumulation data available.	
Silicon carbide (409-21-2)	
Bioaccumulative potential	Bioaccumulation: not applicable.

# 12.4. Mobility in soil

Crystalline silica (14808-60-7)	
Ecology - soil	No (test)data on mobility of the substance available.

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#### 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

#### 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

#### Silicon carbide (409-21-2)

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)

# Silicon carbide (409-21-2)

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)

#### Silicon carbide (409-21-2)

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
Silicon carbide(409-21-2)	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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#### 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.

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