

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 9/22/2023

SECTION 1: Identification

1.1. Identification Product form : Mixture Trade name Reno Cast 115 · Product code 611520 :

1.2. Recommended use and restrictions on use

Recommended use

: Refractory Applications

1.3. Supplier

Manufacturer

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

2.1. Classification of the substance or mixture		
GHS US classification		
Carcinogenicity Category 1A	H350	May cause cancer
Specific target organ toxicity (repeated exposure) Category 1	H372	Causes damage to organs through prolonged or repeated exposure
Full text of H statements : see section 16		
2.2. GHS Label elements, including precautionary state	ements	
GHS US labeling		
Hazard pictograms (GHS US) :		

Signal word (GHS US) Hazard statements (GHS US)

Precautionary statements (GHS US)

- 3
- : Danger
- H350 May cause cancer :
 - H372 Causes damage to organs through prolonged or repeated exposure
- : P201 Obtain special instructions before use.
 - P202 Do not handle until all safety precautions have been read and understood.
 - P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P264 Wash hands, forearms and face thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P308+P313 If exposed or concerned: Get medical advice/attention.
- P314 Get medical advice/attention if you feel unwell.

Safety Data Sheet

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

P501 - 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)

No additional information available

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	2.85 – 15.85	Carc. 1A, H350 STOT RE 1, H372
Silica, crystalline – cristobalite	CAS-No.: 14464-46-1	4.2 – 6.4	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.	
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		
Hazardous decomposition products in case of fire	: Toxic fumes may be released.	
5.3. 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.	

Safety Data Sheet

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

SECTION 6: Accidental release measures 6.1. Personal precautions, protective equipment and emergency procedures		
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 auth	horities if product enters sewers or public waters.	
6.3. Methods and material for containment and cleaning up		

Methods for cleaning up : Mechanically recover the produ	uct. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid res	sidues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

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

Storage conditions

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Reno Cast 115		
No additional information available		
Silica, crystalline – cristobalite (14464-46-1)		
USA - ACGIH - Occupational Exposure Limits		
Local name	Silica crystaline - cristobalite	
ACGIH OEL TWA	0.025 mg/m³ (Respirable fraction)	
Remark (ACGIH)	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)	

Safety Data Sheet

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

Silica, crystalline – cristobalite (14464-46-1)		
Regulatory reference	ACGIH 2023	
USA - OSHA - Occupational Exposure Limits		
Local name	Cristobalite (Silica: Crystalline)	
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.	
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts	
Crystalline silica (14808-60-7)		
USA - ACGIH - Occupational Exposure Limits		
Local name	Silica crystaline - quartz	
ACGIH OEL TWA	0.025 mg/m ³ (Respirable fraction)	
Remark (ACGIH)	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)	
Regulatory reference	ACGIH 2023	
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	

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.	

Personal protective equipment symbol(s):



Safety Data Sheet

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Granular powder.
Color	: Light gray
Odor	: Odourless
Odor threshold	: No data available
рН	: No data available
Melting point	: No data available
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.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

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.

Safety Data Sheet

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

SECTION 11: Toxicological information	
11.1. Information on toxicological effects	
Acute toxicity (oral):Acute toxicity (dermal):Acute toxicity (inhalation):	Not classified Not classified Not classified Not classified
Silica, crystalline – cristobalite (14464-46-1)	
рН	6 - 7
Crystalline silica (14808-60-7)	
рН	6 - 7
Serious eye damage/irritation :	Not classified
Silica, crystalline – cristobalite (14464-46-1)	
рН	6 - 7
Crystalline silica (14808-60-7)	
рН	6 - 7
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
5 1	Not classified
STOT-repeated exposure :	Causes damage to organs through prolonged or repeated exposure.
Silica, crystalline – cristobalite (14464-46-1)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Crystalline silica (14808-60-7)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
•	Not classified
	Not applicable
Silica, crystalline – cristobalite (14464-46-1)	
Viscosity, kinematic	Not applicable
Crystalline silica (14808-60-7)	
Viscosity, kinematic	Not applicable (solid)

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.	

Safety Data Sheet

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

Silica, crystalline – cristobalite (144	34_46_1)
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
Crystalline silica (14808-60-7)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)
12.3. Bioaccumulative potential	
Silica, crystalline – cristobalite (144	64-46-1)
Bioaccumulative potential	No test data available.
Crystalline silica (14808-60-7)	
Bioaccumulative potential	Bioaccumulation: not applicable.
12.4. Mobility in soil	
Silica, crystalline – cristobalite (144	64-46-1)
Ecology - soil	No (test)data on mobility of the substance available.
Crystalline silica (14808-60-7)	
Ecology - soil	No (test)data on mobility of the substance available.
12.5. Other adverse effects	
No additional information available	
	tions

Waste treatment methods

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

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

- Proper Shipping Name (DOT) Proper Shipping Name (TDG) Proper Shipping Name (IMDG) Proper Shipping Name (IATA)
- : Not applicable : Not applicable
- : Not applicable
- : Not applicable

Safety Data Sheet

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

14.3. Transport hazard class(es)	
DOT Transport hazard class(es) (DOT)	: Not applicable
TDG Transport hazard class(es) (TDG)	: Not applicable
IMDG Transport hazard class(es) (IMDG)	: Not applicable
IATA Transport hazard class(es) (IATA)	: Not applicable
14.4. Packing group	
Packing group (DOT) Packing group (TDG) Packing group (IMDG) Packing group (IATA)	 Not applicable Not applicable Not applicable Not applicable
14.5. Environmental hazards	
Other information	: No supplementary information available.

14.6. Special precautions for user

DOT

No data available

TDG

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US 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

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

Listed on the Canadian DSL (Domestic Substances List)

Safety Data Sheet

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

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
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
Crystalline silica(14808-60-7)	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 : 9/22/2023

Full text of H-phrases	
H350	May cause cancer
H372	Causes damage to organs through prolonged or repeated exposure

Reno Safety Data Sheet (SDS), USA

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.