

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 09/25/2019

SECTION 1: Identification	
1.1. Identification	
Product form	: Mixture
Trade name	: Reno Cast 50 LC
Product code	: 142000
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	
1.4. Emergency telephone number	
Emergency number	: 1-800-262-8200 CHEMTREC
SECTION 2: Hazard(s) identification	
2.1. Classification of the substance or m	ixture
GHS US classification	
Carcinogenicity, Category 1A	May cause cancer.
Specific target organ toxicity — Repeated expose Category 1	Ire, Causes damage to organs through prolonged or repeated exposure.
2.2. GHS Label elements, including prec	autionary statements
GHS US labelling	
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/vapours/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
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	n on ingredients
3.1. Substances	
Not applicable	
3.2. Mixtures	

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Name	Product identifier	%	GHS US classification
Silica, crystalline – cristobalite	(CAS-No.) 14464-46-1	9.45 - 13.4	STOT RE 1, H372
Crystalline silica	(CAS-No.) 14808-60-7	0.85 - 2.1	Carc. 1A, H350 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 or a doctor if you feel unwell.
4.2. Most important symptoms and effect	ts (acute and delayed)
No additional information available	
4.3. Immediate medical attention and spe	ecial treatment, if necessary
Treat symptomatically.	
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguishing	
Suitable extinguishing media	: Water spray. Dry powder. Foam.
5.2. Specific hazards arising from the che	emical
No additional information available	
5.3. Special protective equipment and protecti	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release meas	ures
6.1. Personal precautions, protective equ	lipment 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/vapours/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 authoritie	es if product enters sewers or public waters.
6.3. Methods and material for containment	nt 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	: 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/vapours/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.
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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

3.1. Control pa	rameters	
Silica, crystalline -	- cristobalite (14464-46-1)	
ACGIH	Local name	Silica crystaline - cristobalite
ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³ (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
Crystalline silica (14808-60-7)	
ACGIH	Local name	Silica crystaline - quartz
ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³ (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.

1.1. Information on basic	Information on basic physical and chemical properties	
Physical state	: Solid	
Colour	: Colourless to white-grey	
Ddour	: Almost odourless	
Ddour threshold	: No data available	
н	: No data available	
lelting point	: No data available	
reezing point	: Not applicable	

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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	: No data available
Solubility	: No data available
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

9.2. Other information

No additional information available

SECTI	SECTION 10: Stability and reactivity				
10.1.	Reactivity				
The proc	duct is non-reactive under normal conditions of use, storage and transport.				
10.2.	Chemical stability				
Stable u	nder normal conditions.				
10.3.	Possibility of hazardous reactions				
No dang	perous 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 sensitisation	: 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	
STOT-single exposure	: Not classified	
STOT-repeated exposure	: Causes damage to organs through prolonged or repeated exposure.	

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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.	
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 nor to cause long-term adverse effects in the environment.	

12.2.	Persistence	and	degradability

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	
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	

12.3. Bioaccumulative potential

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

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Transport by sea

Not applicable

Air transport

Not applicable

SECTION 15: Regulatory information			
15.1. US Federal regulations			
Silica, crystalline – cristobalite (14464-46-1)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory			
Crystalline silica (14808-60-7)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory			

15.2. International regulations

CANADA

Silica, crystalline – cristobalite (14464-46-1)		
ſ	Listed on the Canadian DSL (Domestic Substances List)	

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 New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

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: 09/25/2019

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.