

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 04/30/2019

SECTION 1: Identification	
1.1. Identification	
	: Mixture
	: R-Basin Mix
Product code	: 400100
1.2. Recommended use and restrictions of	
	: 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	
	: 1-800-262-8200 CHEMTREC
SECTION 2: Hazard(s) identification	
2.1. Classification of the substance or mix	ture
GHS-US classification	
Carcinogenicity Category 1A	May cause cancer
Specific target organ toxicity (repeated exposure)	Causes damage to organs through prolonged or repeated exposure
Category 1	
2.2. GHS Label elements, including preca	utionary statements
GHS US labeling	
Hazard pictograms (GHS US)	
Signal word (GHS US)	: Danger
	: 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
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	
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Safety Data Sheet

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

Name	Product identifier	%	GHS-US classification
Silica, crystalline – cristobalite	(CAS-No.) 14464-46-1	8.4 - 21.1	STOT RE 1, H372
Crystalline silica	(CAS-No.) 14808-60-7	0 - 7.6	Carc. 1A, H350 STOT RE 1, H372

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

SECTION 4: First-aid measure	S
4.1. Description of first aid meas	sures
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 a	and effects (acute and delayed)
No additional information available	
4.3. Immediate medical attention	n and special treatment, if necessary
Treat symptomatically.	
SECTION 5: Fire-fighting mea	sures
5.1. Suitable (and unsuitable) ex	tinguishing media
Suitable extinguishing media	: Water spray. Dry powder. Foam.
5.2. Specific hazards arising fro	m the chemical
No additional information available	
	nt and processions for fire fightors
5.3. Special protective equipmen Protection during firefighting	nt and precautions for fire-fighters : Do not attempt to take action without suitable protective equipment. Self-contained breathing
	apparatus. Complete protective clothing.
SECTION 6: Accidental releas	e measures
6.1. Personal precautions, prote	ctive equipment and emergency procedures
6.1.1. For non-emergency person	nel
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.
.3. Methods and material for co	ontainment and cleaning up
Aethods 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 1	
SECTION 7: Handling and sto	rage
7.1. Precautions for safe handlin	
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/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.

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

8 1

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

SECTION 8: Exposure controls/personal protection **Control parameters**

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
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

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:

Wear respiratory protection.

SECTION 9: Physical ar 9.1. Information on basic	physical and chemical properties	
Physical state	: Solid	
Color	: Colourless to white-grey	
Odor	: Almost odourless	
Odor threshold	: No data available	
рН	: No data available	
Melting point	: No data available	
Freezing point	: Not applicable	
04/30/2019	EN (English LIS)	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	: 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
Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available
0.0 Others information	

9.2. Other information

: 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

VOC content

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 informat	ion
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 exposure	: Causes damage to organs through prolonged or repeated exposure.

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 consideration	S
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

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 crystalling – cristobalite ($1/1/6/1/6-1$)	

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

: 04/30/2019

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.