

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 02/09/2021

ECTION 1: Identification			
.1. Identification			
Product form	: Mixture		
Trade name	: Reno ElectroCast™ 386		
Product code	: 191620		
1.2. Recommended use and restrictio	ns 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	<u>1</u>		
1.4. Emergency telephone number			
Emergency number	: 1-800-262-8200 CHEMTREC		
SECTION 2: Hazard(s) identificatio	on		
2.1. Classification of the substance or	r mixture		
GHS US classification			
Carcinogenicity Category H350 1A	May cause cancer		
Full text of H statements : see section 16			
	recautionary statements		
2.2. GHS Label elements, including pr GHS US labeling Hazard pictograms (GHS US)	recautionary statements		
GHS US labeling Hazard pictograms (GHS US)			
GHS US labeling Hazard pictograms (GHS US) Signal word (GHS US)	: Danger		
GHS US labeling Hazard pictograms (GHS US)		ety precautions have b otective clothing/eye p erned: Get medical adv iner to hazardous or s	protection/face protection. vice/attention. pecial waste collection point, ir
GHS US labeling Hazard pictograms (GHS US) Signal word (GHS US) Hazard statements (GHS US) Precautionary statements (GHS US)	<ul> <li>Danger</li> <li>H350 - May cause cancer</li> <li>P201 - Obtain special instructions P202 - Do not handle until all safe P280 - Wear protective gloves/pre P308+P313 - If exposed or conce P501 - Dispose of contents/conta accordance with local, regional, n</li> </ul>	ety precautions have b otective clothing/eye p erned: Get medical adv iner to hazardous or s	protection/face protection. vice/attention. pecial waste collection point, ir
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#### 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)
4.3. Immediate medical attention and spec	ial treatment, if necessary
Treat symptomatically.	
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguishin	ig media
Suitable extinguishing media	: Water spray. Dry powder. Foam.
5.2. Specific hazards arising from the cher	mical
Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Special protective equipment and pre-	cautions 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 measu	ires
6.1. Personal precautions, protective equi	pment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Only qualified personnel equipped with suitable protective equipment may intervene.
6.1.2. For emergency responders	
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	s if product enters sewers or public waters.
6.3. Methods and material for containment	t 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.
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.
7.2. Conditions for safe storage, including	
Storage conditions	: Store locked up. Store in a well-ventilated place. Keep cool.

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### SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

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No additional information available	
Crystalline silica (14808-60-7)	
USA - ACGIH - Occupational Exposure Lim	nits
Local name	Silica crystaline - quartz
ACGIH TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (Respirable fraction)
Remark (ACGIH)	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2020
USA - OSHA - Occupational Exposure Lim	its
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 Lim	iits
Local name	Silicon carbide
ACGIH TWA (mg/m³)	<ul> <li>3 mg/m³ (Respirable fraction. The value is for particulate matter containing no asbestos and &lt; 1% crystalline silica)</li> <li>0.1 fibers/cm³ (Respirable fibers: length &gt; 5 μm; aspect ratio ≥ 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination)</li> <li>10 mg/m³ (Inhalable fraction. The value is for particulate matter containing no asbestos and &lt; 1% crystalline silica)</li> </ul>
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 Lim	its
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 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.

Personal protective equipment symbol(s):

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SECTION 9: Physical and chemical p	roperties
0.1. Information on basic physical and ch	•
Physical state	: Solid
Appearance	: Granular powder.
Color	: Colorless Gray
Odor	: Almost odorless
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	: 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

No additional information available

SECT	ION 10: Stability and reactivity
10.1.	Reactivity
The pro	duct 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 dan	gerous reactions known under normal conditions of use.
10.4.	Conditions to avoid
None u	nder recommended storage and handling conditions (see section 7).
10.5.	Incompatible materials
No add	itional information available
10.6.	Hazardous decomposition products
Under r	normal conditions of storage and use, hazardous decomposition products should not be produced.
SECT	ION 11: Toxicological information
11.1.	Information on toxicological effects

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Acute toxicity (oral)	: Not classified
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
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
STOT-repeated 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

<b>SECTION 12: Ecological information</b>	
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.	
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

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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

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

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#### SECTION 16: Other information

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Rev	sion date	: 02/09/2021
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.