

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 02/10/2021

SECTION 1: Identification			
1.1. Identification			
Product form	: Mixture		
Trade name	: Reno ElectroPump™ 1122 SiC		
Product code	: 195030		
1.2. Recommended use and restrictio			
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.con	1		
1.4. Emergency telephone number			
Emergency number	: 1-800-262-8200 CHEMTREC		
SECTION 2: Hazard(s) identification	n		
2.1. Classification of the substance of	mixture		
GHS US classification			
Carcinogenicity Category 1A	May cause cancer		
2.2. GHS Label elements, including pr	ecautionary statements		
GHS US labeling			
Hazard pictograms (GHS US)			
Signal word (GHS US)	: Danger		
Hazard statements (GHS US)	: May cause cancer		
Precautionary statements (GHS US)	<ul> <li>Obtain special instructions before Do not handle until all safety prec Wear protective gloves/protective If exposed or concerned: Get me Dispose of contents/container to with local, regional, national and/</li> </ul>	cautions have been rea e clothing/eye protection dical advice/attention. hazardous or special w	n/face protection. aste collection point, in accordance
2.3. Other hazards which do not resul	t in classification		
No additional information available			
2.4. Unknown acute toxicity (GHS US)			
Not applicable			
SECTION 3: Composition/Informat	ion on ingredients		
3.1. Substances			
Not applicable			
3.2. Mixtures			
Name	Product identifier	%	GHS US classification
Silicon carbide	(CAS-No.) 409-21-2	18.64 – 24.88	Carc. 1B, H350
Titanium dioxide	(CAS-No.) 13463-67-7	≤ 3.177	Carc. 2, H351
Carbon Black	(CAS-No.) 1333-86-4	0.41 – 0.84	Carc. 2, H351
Crystalline silica	(CAS-No.) 14808-60-7	≤ 0.294	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	
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 speci	ial treatment if necessary
Treat symptomatically.	
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguishing	a media
Suitable extinguishing media	: Water spray. Dry powder. Foam.
5.2. Specific hazards arising from the chem Hazardous decomposition products in case of	: Toxic fumes may be released.
fire	. Toxic fumes may be released.
5.3. Special protective equipment and prec	autions for fire-fighters
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
<b>SECTION 6: Accidental release measu</b>	res
6.1. Personal precautions, protective equip	oment 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	
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.
6.3. Methods and material for containment	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 in a well-ventilated place. Keep cool.

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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available	
Titanium dioxide (13463-67-7)	
USA - ACGIH - Occupational Exposure Limits	s
Local name	Titanium dioxide
ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
	TLV® Basis: LRT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Remark (ACGIH) Regulatory reference	ACGIH 2020
USA - OSHA - Occupational Exposure Limits	
Local name	Titanium dioxide (Total dust)
OSHA PEL (TWA) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup>
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Silicon carbide (409-21-2)	
USA - ACGIH - Occupational Exposure Limits	
	Silicon carbide
ACGIH TWA (mg/m³)	<ul> <li>3 mg/m³ (Respirable fraction. The value is for particulate matter containing no asbesto 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 Limits	
Local name	Silicon carbide
OSHA PEL (TWA) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup> (Total dust) 5 mg/m <sup>3</sup> (Respirable fraction)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Carbon Black (1333-86-4)	
USA - ACGIH - Occupational Exposure Limits	5
Local name	Carbon black
ACGIH TWA (mg/m³)	3 mg/m <sup>3</sup> (Inhalable fraction)
Remark (ACGIH)	TLV® Basis: Bronchitis. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2020
USA - OSHA - Occupational Exposure Limits	
Local name	Carbon black
OSHA PEL (TWA) (mg/m <sup>3</sup> )	3.5 mg/m <sup>3</sup>
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Crystalline silica (14808-60-7)	
USA - ACGIH - Occupational Exposure Limits	3
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 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.

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OSHA Annotated Table Z-3 Mineral Dusts	
3	
: Ensure good ventilation of the work station.	
: Avoid release to the environment.	
Personal protective equipment	
	s : Ensure good ventilation of the work station.

Protective gloves

Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### **Respiratory protection:**

Wear respiratory protection.

Personal protective equipment symbol(s):



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

0.1. Information on basic physical and ch	emical properties
Physical state	: Solid
Color	: Grey to black
Odor	: Almost 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	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available

No additional information available

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ECTION 10: Stability and reactivity	AY
0.1. Reactivity	
he product is non-reactive under normal cond	ditions of use, storage and transport.
0.2. Chemical stability	
Stable under normal conditions.	
0.3. Possibility of hazardous reactions	3
lo dangerous reactions known under normal	conditions of use.
0.4. Conditions to avoid	
lone under recommended storage and handli	ng conditions (see section 7).
0.5. Incompatible materials	
lo additional information available	
0.6. Hazardous decomposition produc	ts
	azardous decomposition products should not be produced.
SECTION 11: Toxicological inform	
1.1. Information on toxicological effect	
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
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Titanium dioxide (13463-67-7)	> 5000 mg/kg body weight (OECD 425: Acute Oral Toxicity: Up-and-Down Procedure, Rat,
	Female, Experimental value, Oral, 14 day(s))
LC50 Inhalation - Rat	> 6.82 mg/l (Other, 4 h, Rat, Male, Experimental value, Inhalation (dust), 14 day(s))
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)
Carbon Black (1333-86-4)	
LD50 oral rat	> 10000 mg/kg (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 28 day(s))
LC50 Inhalation - Rat	> 4.6 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Experimental value, Inhalation (dust))
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.
Titanium dioxide (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans
Silicon carbide (409-21-2)	
IARC group	2A - Probably carcinogenic to humans
Carbon Black (1333-86-4)	
IARC group	2B - Possibly carcinogenic to humans
Crystalline silica (14808-60-7)	
IARC group	1 - Carcinogenic to humans
n'ito group	

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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

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.
Titanium dioxide (13463-67-7)	
LC50 fish 1	> 100 mg/l (Equivalent or similar to OECD 203, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Nominal concentration)
ErC50 (algae)	61 mg/l (EPA 600/9-78-018, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)
Carbon Black (1333-86-4)	
LC50 fish 1	> 1000 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, Lethal)
EC50 Daphnia 1	> 5600 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 24 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 (algae)	> 10000 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)

#### 12.2. Persistence and degradability

Titanium dioxide (13463-67-7)	
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
Carbon Black (1333-86-4)	
Persistence and degradability	Biodegradability in soil: not applicable. Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)
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

Titanium dioxide (13463-67-7)		
Bioaccumulative potential	Not bioaccumulative.	
Silicon carbide (409-21-2)		
Bioaccumulative potential	Bioaccumulation: not applicable.	
Carbon Black (1333-86-4)		
Bioaccumulative potential	Not bioaccumulative.	

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Discoursulative notantial	No bioaccumulation data available.
Bioaccumulative potential	No bioaccumulation data available.
2.4. Mobility in soil	
Titanium dioxide (13463-67-7)	
Ecology - soil	Low potential for mobility in soil.
Carbon Black (1333-86-4)	
Surface tension	Not applicable (solid)
Ecology - soil	No (test)data on mobility of the substance available. Not toxic to plants. Not toxic to animals.
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 conside	rations
13.1. Disposal methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
SECTION 14: Transport inform	ation
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 inform	nation
15.1. US Federal regulations	
Titanium dioxide (13463-67-7)	
Listed on the United States TSCA (To	xic Substances Control Act) inventory
Silicon carbide (409-21-2)	
Listed on the United States TSCA (To	xic Substances Control Act) inventory
Carbon Black (1333-86-4)	
Listed on the United States TSCA (To	xic Substances Control Act) inventory
Crystalline silica (14808-60-7)	
Listed on the United States TSCA (To	xic Substances Control Act) inventory
15.2. International regulations	
CANADA	
Titanium dioxide (13463-67-7)	

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

Listed on the Canadian DSL (Domestic Substances List)

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Carbon Black (1333-86-4)		
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		
Titanium dioxide (13463-67-7)		
Listed on IARC (International Agency for Research on Cancer)		
Silicon carbide (409-21-2)		
Listed on IARC (International Agency for Research on Cancer)		
Carbon Black (1333-86-4)		
Listed on IARC (International Agency for Research on Cancer)		
Crystalline silica (14808-60-7)		
Listed on IARC (International Agency for Research on Cancer)		

15.3. US State regulations

Carbon Black (1333-86-4)					
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		

Component	State or local regulations
Titanium dioxide(13463-67-7)	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
Silicon carbide(409-21-2)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List
Carbon Black(1333-86-4)	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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#### Full text of H-phrases:

···· ··· ··· ··· ···			
H350	May cause cancer		
H351	Suspected of causing 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.