

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 04/18/2019

SECTION 1: Identification			
1.1. Identification			
Product form	Mixture		
Trade name :	Reno Cast SF 65 LC		
Product code :	155500		
1.2. Recommended use and restrictions of	n 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 mix	ture		
GHS-US classification			
Carcinogenicity Category 1A	May cause cancer		
2.2. GHS Label elements, including precau	utionary statements		
GHS US labeling			
Hazard pictograms (GHS US) :			
Signal word (GHS US)	Danger		
Hazard statements (GHS US)	May cause cancer		
Precautionary statements (GHS US)	Obtain special instructions before use.		
	Do not handle until all safety precautio Wear protective gloves/protective cloth If exposed or concerned: Get medical Dispose of contents/container to hazar with local, regional, national and/or inte	ns have been r hing/eye protect advice/attentior dous or specia	tion/face protection. n. I waste collection point, in accordance
2.3. Other hazards which do not result in o	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			
Name	Product identifier	%	GHS-US classification
Crystalline silica	(CAS-No.) 14808-60-7	0.15 - 0.5	Carc. 1A, H350 STOT RE 1, H372
Titanium dioxide	(CAS-No.) 13463-67-7	0.03 - 0.25	Carc. 2, H351

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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. 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 and effects	(acute and delayed)		
No additional information available			
4.3. Immediate medical attention and spec	ial treatment, if necessary		
Treat symptomatically.			
SECTION 5: Fire-fighting measures			
5.1. Suitable (and unsuitable) extinguishin	g media		
Suitable extinguishing media :	Water spray. Dry powder. Foam.		
5.2. Specific hazards arising from the cher	nical		
No additional information available			
5.3. Special protective equipment and pred	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	oment and emergency procedures		
6.1.1. For non-emergency personnel			
	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.		
Storage conditions : Store in a well-ventilated place. Keep cool.			
SECTION 8: Exposure controls/persor	nal protection		
8.1. Control parameters			

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Crystalline silica (14808-60-	7)	
ACGIH	Local name	Silica crystaline - quartz
ACGIH	ACGIH TWA (mg/m³)	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
Titanium dioxide (13463-67-7)		
ACGIH	Local name	Titanium dioxide
ACGIH	ACGIH TWA (mg/m³)	10 mg/m ³
ACGIH	Remark (ACGIH)	TLV® Basis: LRT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³
OSHA	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.

SECTION 9: Physical and chemica 9.1. Information on basic physical and		
Physical state	: Solid	
Color	: Grey	
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	: 2.53	
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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
9.2. Other information	

VOC content : 0 % **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 Hazardous decomposition products 10.6. 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
Titanium dioxide (13463-67-7)	
LD50 oral rat	> 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 (mg/l)	> 6.82 mg/l (Other, 4 h, Rat, Male, Experimental value, Inhalation (dust), 14 day(s))
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
Titanium dioxide (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified

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Crystalline silica (14808-60-7)	
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.
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)

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
Titanium dioxide (13463-67-7)	
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)	

litanium dioxide (13463-67-7)		
Bioaccumulative potential	Not bioaccumulative.	
2.4. Mobility in soil		
Titanium dioxide (13463-67-7)		
Ecology - soil Low potential for mobility in soil.		

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

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Transport by sea

Not applicable

Air transport

Not applicable

Titanium dioxide (13463-67-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Crystalline silica (14808-60-7)
15.1. US Federal regulations
SECTION 15: Regulatory information

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)

Titanium dioxide (13463-67-7)

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)	
Titanium dioxide (13463-67-7)	
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
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

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)

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