

# Safety Data Sheet

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

Revision date: 03/15/2019

#### **SECTION 1: Identification**

1.1. Identification

Product form : Mixture

Trade name : Reno Cast 8067 EF

Product code : 157400

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 mixture

#### **GHS US classification**

Carcinogenicity, Category 1A

May cause cancer.

Specific target organ toxicity — Repeated exposure, Category 1 Causes damage to organs through prolonged or repeated exposure.

#### 2.2. GHS Label elements, including precautionary 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 on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
Titanium dioxide	(CAS-No.) 13463-67-7	0.05 - 4.0275	Carc. 2, H351

03/15/2019 EN (English) Page 1

# Safety Data Sheet

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

Name	Product identifier	%	GHS US classification
Crystalline silica	(CAS-No.) 14808-60-7	< 1.089	Carc. 1A, H350 STOT RE 1, H372

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

#### **SECTION 4: First-aid measures**

#### **Description of first aid measures**

: IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you First-aid measures general

feel unwell. Get medical advice/attention if you feel unwell.

: Remove person to fresh air and keep comfortable for breathing. First-aid measures after inhalation

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.

#### Most important symptoms and effects (acute and delayed)

No additional information available

#### Immediate medical attention and special treatment, if necessary 4.3.

Treat symptomatically.

#### **SECTION 5: Fire-fighting measures**

## Suitable (and unsuitable) extinguishing media

: Water spray. Dry powder. Foam. Suitable extinguishing media

#### 5.2 Specific hazards arising from the chemical

No additional information available

#### Special protective equipment and precautions 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 measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

: Only qualified personnel equipped with suitable protective equipment may intervene. Do not **Emergency procedures** 

breathe dust/fume/gas/mist/vapours/spray.

#### 6.1.2. For emergency responders

: Do not attempt to take action without suitable protective equipment. For further information Protective equipment

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.

### 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.

#### Reference to other sections

For further information refer to section 13.

#### SECTION 7: Handling and storage

#### 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.

Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke Hygiene measures when using this product. Always wash hands after handling the product.

03/15/2019 EN (English) 2/7

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

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

Crystalline silica (	14808-60-7)			
ACGIH	Local name	Silica crystaline - quartz		
ACGIH	ACGIH TWA (mg/m³)	0.025 mg/m³ (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/m³		
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 : Ensure good ventilation of the work station.

Environmental exposure controls : 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.

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

## 9.1. Information on basic physical and chemical properties

Physical state : Solid
Colour : Grey
Odour : odourless
Odour threshold : No data available
pH : No data available

Melting point : > °F

Freezing point : Not applicable

Boiling point : 102

Flash point : Not applicable

03/15/2019 EN (English) 3/7

# Safety Data Sheet

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

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 : 2.8

Solubility : Water: < 0.1 % Log Pow : No data available Auto-ignition temperature Not applicable Decomposition temperature : No data available : No data available Viscosity, kinematic Viscosity, dynamic : No data available Explosive limits : Not applicable Explosive properties : No data available Oxidising 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

#### 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

Titanium dioxide (13463-67-7)		
LD50 oral rat	> 5000 mg/kg bodyweight (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 sensitisation : 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
STOT-single exposure	: Not classified

03/15/2019 EN (English) 4/7

# Safety Data Sheet

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

STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.

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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.

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)

## 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)	
Bioaccumulative potential	Not bioaccumulative.

## 12.4. 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 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

03/15/2019 EN (English) 5/7

# Safety Data Sheet

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

#### **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

#### Titanium dioxide (13463-67-7)

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**

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

Revision date : 03/15/2019

## Full text of H-statements:

H350	May cause cancer.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.

03/15/2019 EN (English) 6/7

# Safety Data Sheet

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

SDS US (GHS HazCom 2012)

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03/15/2019 EN (English) 7/7