

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 7/13/2023

SECTION 1: Identification

1.1. Identification

Product form Trade name Product code : Mixture : Reno Cast 9010 CRM

: 619000

1.2. Recommended use and restrictions on use

Recommended use

: Refractory Applications

1.3. Supplier

Manufacturer

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

1.4. Emergency telephone number

Emergency number

: 1-800-262-8200 CHEMTREC

SECTION 2: Hazard(s) identification						
2.1. Classification of the substance or n	ixture					
GHS US classification						
Skin corrosion/irritation Category 2	H315 Causes skin irritation					
Serious eye damage/eye irritation Category 2B	H320 Causes eye irritation H317 May cause an allergic sk	in reaction				
Skin sensitization, Category 1 Full text of H statements : see section 16	H317 May cause an allergic sk	In reaction				
2.2. GHS Label elements, including prec	autionary statements					
GHS US labeling						
Hazard pictograms (GHS US)						
Signal word (GHS US)	: Warning					
Hazard statements (GHS US)	: H315 - Causes skin irritation					
	H317 - May cause an allergic skin reaction H320 - Causes eye irritation					
Precautionary statements (GHS US)	: P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.					
	P264 - Wash hands, forearms and face thoroughly after I					
	P272 - Contaminated work clothing must not be allowed	out of the workplace.				
	P280 - Wear protective gloves/protective clothing/eye protection/face protection.					
	P302+P352 - If on skin: Wash with plenty of water.					
	P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove					
	contact lenses, if present and easy to do. Continue rinsin	a				

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P332+P313 - If skin irritation occurs: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P501 - 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)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Chromium(III) oxide	CAS-No.: 1308-38-9	8 – 12	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Skin Sens. 1, H317

SECTION 4: First-aid measures					
4.1. Description of first aid measures					
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. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.				
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.				
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.				

Symptoms/effects after skin contact Symptoms/effects after eye contact Irritation. May cause an allergic skin reaction.Mild eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION	5: Fire-f	ighting me	easures							
5.1. Suitabl	e (and u	nsuitable) e	xtinguishing r	nedia						

Suitable extinguishing media

: Water spray. Dry powder. Foam.

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5.2. Specific hazards arising from	n the chemical
Hazardous decomposition products in ca	ase of fire : Toxic fumes may be released.
5.3. Special protective equipment	t 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 releas	e measures
6.1. Personal precautions, protec	tive equipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing 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.

6.3. Methods and material for containment and cleaning up				
Methods for cleaning up Other information	Mechanically recover the product.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. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapors/spray.			
Hygiene measures	: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.			

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

Reno Cast 9010 CRM

No additional information available

Chromium(III) oxide (1308-38-9)

No additional information available

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8.2. Appropriate engineering controls

Appropriate engineering controls Environmental exposure controls : Ensure good ventilation of the work station.

tal exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

nd protection:
otective gloves
e protection:
fety glasses
in and body protection:
ear suitable protective clothing
spiratory protection:
case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Granular powder.
Color	: Green On exposure to heat: turns brown
Odor	: Characteristic odour
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	: Not applicable
Viscosity, dynamic	: No data available
Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available

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9.2. Other information

No additional information available

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	ation
11.1. Information on toxicological effect	sts
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Not classified Not classified Not classified
Chromium(III) oxide (1308-38-9)	
LD50 oral rat	> 5000 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LC50 Inhalation - Rat	> 5.41 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))
Skin corrosion/irritation	Causes skin irritation.
Chromium(III) oxide (1308-38-9)	
рН	No data available in the literature
Serious eye damage/irritation	Causes eye irritation.
Chromium(III) oxide (1308-38-9)	
рН	No data available in the literature
Respiratory or skin sensitization Germ cell mutagenicity Carcinogenicity Reproductive toxicity STOT-single exposure STOT-repeated exposure	 May cause an allergic skin reaction. Not classified Not classified Not classified Not classified Not classified Not classified
Aspiration hazard	: Not classified

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Viscosity, kinematic	: Not applicable	
Chromium(III) oxide (1308-38-9)		
Viscosity, kinematic	Not applicable (solid)	
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.	
Symptoms/effects after eye contact	: Mild eye irritation.	

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.	
Chromium(III) oxide (1308-38-9)		
LC50 - Fish [1]	> 10000 mg/l (ISO 7346-1, 96 h, Danio rerio, Static system, Fresh water, Experimental value, GLP)	
12.2. Persistence and degradability		
Chromium(III) oxide (1308-38-9)		
Persistence and degradability	Biodegradability: not applicable.	
Chemical oxygen demand (COD)	Not applicable (inorganic)	
ThOD	Not applicable (inorganic)	
12.3. Bioaccumulative potential		
Chromium(III) oxide (1308-38-9)		
Bioaccumulative potential	Not bioaccumulative.	
12.4. Mobility in soil		
Chromium(III) oxide (1308-38-9)		
Surface tension	No data available in the literature	
Ecology - soil	Adsorbs into the soil.	
12.5. Other adverse effects		
No additional information available		

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

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

Not regulated for transport

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14.2. UN proper shipping name		
Proper Shipping Name (DOT) Proper Shipping Name (TDG) Proper Shipping Name (IMDG) Proper Shipping Name (IATA)	 Not applicable Not applicable Not applicable Not applicable 	
14.3. Transport hazard class(es)		
DOT Transport hazard class(es) (DOT)	: Not applicable	
TDG Transport hazard class(es) (TDG)	: Not applicable	
IMDG Transport hazard class(es) (IMDG)	: Not applicable	
IATA Transport hazard class(es) (IATA)	: Not applicable	
14.4. Packing group		
Packing group (DOT) Packing group (TDG) Packing group (IMDG) Packing group (IATA)	 Not applicable Not applicable Not applicable Not applicable Not applicable 	
14.5. Environmental hazards		
Other information	: No supplementary information available.	
14.6. Special precautions for user		
DOT No data available		
TDG No data available		
IMDG No data available		
IATA No data available		
14.7. Transport in bulk according to Ann	nex II of MARPOL 73/78 and the IBC Code	
Not applicable		
SECTION 15: Regulatory information	n	
45.4 LIS Enderel regulations		

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

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15.2. International regulations

CANADA

Chromium(III) oxide (1308-38-9)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations	
Component	State or local regulations
Chromium(III) oxide(1308-38-9)	U.S New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

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Full text of H-phrases	
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H320	Causes eye irritation

Reno Safety Data Sheet (SDS), USA

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.