

Safety Data Sheet



Section 1: Identification

Product identifier

Product Name | **Reno Gun SP 92**
Product Code | 127000

Relevant identified uses of the substance or mixture and uses advised against

Recommended use | Refractory applications

Details of the supplier of the safety data sheet

Manufacturer | Reno Refractories, Inc.
 PO Box 201
 Morris, AL 35116
 United States
 www.renorefractories.com
 sales@renorefractories.com
Telephone (General) | 205-647-0240

Emergency telephone number

Manufacturer | 1-800-262-8200 - CHEMTREC

Section 2: Hazard Identification

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012 | Not classified

Label elements

OSHA HCS 2012

Hazard statements | No label element(s) required

Other hazards

OSHA HCS 2012 | This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.

Canada

According to WHMIS

Classification of the substance or mixture

WHMIS | Not classified

Label elements

WHMIS | No label element(s) required.

Other hazards

WHMIS | In Canada, the product mentioned above is not considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

Substances

| Material does not meet the criteria of a substance.

Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Aluminum oxide	CAS:1344-28-1	55.55% TO 80.48%	NDA	OSHA HCS 2012: Not Classified	NDA
Spinel	CAS:1302-67-6	17.82% TO 33.88%	NDA	OSHA HCS 2012: Not Classified	NDA
Cement, alumina, chemicals	CAS:65997-16-2	2% TO 9%	NDA	OSHA HCS 2012: Not Classified	NDA
Magnesium oxide	CAS:1309-48-4	0% TO 1.1%	NDA	OSHA HCS 2012: Not Classified	NDA
1-Propene, homopolymer	CAS:9003-07-0	< 0.15%	Ingestion/Oral-Rat LD50 • >8 g/kg	OSHA HCS 2012: Not Classified	NDA
Sodium aluminate	CAS:1302-42-7	< 0.1%	NDA	OSHA HCS 2012: Exposure limit(s)	NDA

Section 4: First-Aid Measures

Description of first aid measures

- Inhalation** | Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Get medical attention immediately.
- Skin** | In case of contact with substance, immediately flush skin with running water for at least 20 minutes. If skin irritation occurs: Get medical advice/attention.
- Eye** | In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.
- Ingestion** | Rinse mouth. Do not give anything by mouth to an unconscious person. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

| Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Notes to Physician | All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media | Material is non-combustible. In case of fire use media as appropriate for surrounding fire.

Unsuitable Extinguishing Media | None known.

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards | None known.

Hazardous Combustion Products | None known.

Advice for firefighters

| Wear positive pressure self-contained breathing apparatus (SCBA).
Structural firefighters' protective clothing will only provide limited protection.
Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions | Do not touch or walk through spilled material.

Emergency Procedures | Ventilate closed spaces before entering. Isolate hazard area and deny entry to unauthorized and/or unprotected personnel.

Environmental precautions

| No specific actions or treatments recommended related to exposure to this material.

Methods and material for containment and cleaning up

Containment/Clean-up Measures | Avoid generating dust.
FOR SMALL SPILLS: Clean with a vacuum with a filtration system sufficient to remove and prevent recirculation of crystalline silica (a vacuum equipped with a high-efficiency particulate air (HEPA) filter is recommended).
FOR LARGE SPILLS: Use a fine spray or mist to control dust creation and carefully scoop or shovel into clean dry container for later reuse or disposal.

Section 7 - Handling and Storage

Precautions for safe handling

Handling | Use good safety and industrial hygiene practices. Do not use in areas without adequate ventilation. Avoid contact with skin, eyes, and clothing. Wear long sleeves and/or protective coveralls. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Contaminated clothing must be vacuumed before removal. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage | Store in a covered location. Keep container closed. Keep from freezing. Storage and work area should be periodically cleaned to minimize dust accumulation.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines						
	Result	ACGIH	Canada Ontario	Canada Quebec	Mexico	NIOSH
Magnesium oxide (1309-48-4)	TWAs	10 mg/m3 TWA (inhalable fraction)	10 mg/m3 TWA (inhalable)	10 mg/m3 TWAEV (fume, as Mg)	10 mg/m3 TWA LMPE-PPT (fume, as Mg)	Not established
Sodium aluminate as Aluminum, soluble salts	TWAs	Not established	Not established	2 mg/m3 TWAEV (as Al) <i>as Aluminum, soluble salts</i>	2 mg/m3 TWA LMPE-PPT <i>as Aluminum, soluble salts</i>	2 mg/m3 TWA (as Al) <i>as Aluminum, soluble salts</i>
Cement, alumina, chemicals as Particulates not otherwise classified (PNOC)	TWAs	10 mg/m3 TWA (inhalable particles, recommended); 3 mg/m3 TWA (respirable particles, recommended) <i>as Particulates not otherwise classified (PNOC)</i>	10 mg/m3 TWA (inhalable); 3 mg/m3 TWA (respirable) <i>as Particulates not otherwise classified (PNOC)</i>	10 mg/m3 TWAEV (including dust, inert or nuisance particulates; containing no Asbestos and <1% Crystalline silica, total dust) <i>as Particulates not otherwise classified (PNOC)</i>	Not established	Not established
Aluminum oxide (1344-28-1)	TWAs	1 mg/m3 TWA (respirable fraction) <i>as Aluminum insoluble compounds</i>	1 mg/m3 TWA (respirable) <i>as Aluminum insoluble compounds</i>	10 mg/m3 TWAEV (containing no Asbestos and <1% Crystalline silica, total dust, as Al)	10 mg/m3 TWA LMPE-PPT	Not established

Exposure Limits/Guidelines (Con't.)

	Result	OSHA
Magnesium oxide (1309-48-4)	TWAs	15 mg/m3 TWA (fume, total particulate)
Cement, alumina, chemicals	TWAs	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction) <i>as Particulates not otherwise classified (PNOC)</i>
Aluminum oxide (1344-28-1)	TWAs	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)

Exposure Control Notations

Mexico

- Aluminum oxide (1344-28-1): **Carcinogens:** (A4 - Not classifiable as a human carcinogen)

ACGIH

- Aluminum oxide as Aluminum insoluble compounds: **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Magnesium oxide (1309-48-4): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)

Exposure Limits Supplemental

ACGIH

- Aluminum oxide as Aluminum insoluble compounds: **TLV Basis - Critical Effects:** (pneumoconiosis; lower respiratory tract irritation; neurotoxicity)

Exposure controls

Engineering Measures/Controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values. Ensure that dust handling systems (such as exhaust ducts, dust collectors, vessels and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is not leakage from the equipment). Collection systems must be designed and maintained to prevent the accumulation and recirculation of respirable silica into the workplace.

Personal Protective Equipment

Respiratory

For limited exposure use an N95 dust mask. For prolonged exposure use an air-purifying respirator with high efficiency particulate air (HEPA) filters. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

Wear protective eyewear (goggles, face shield, or safety glasses).

Hands

Wear appropriate gloves.

Skin/Body

Wear long sleeves and/or protective coveralls.

Environmental Exposure Controls

Follow best practice for site management and disposal of waste. Dispose of in an approved landfill.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

TWAEV = Time-Weighted Average Exposure Value

NIOSH = National Institute of Occupational Safety and Health

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

OSHA = Occupational Safety and Health Administration

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	White to light gray granular dry powder with an earthy odor.
Color	White to light gray.	Odor	Earthy
Particulate Size	600 µ	Odor Threshold	No data available
General Properties			
Boiling Point	No data available	Melting Point	No data available
Decomposition Temperature	No data available	pH	Not relevant
Specific Gravity/Relative Density	2.53 Water=1	Water Solubility	Negligible < 0.1 %
Viscosity	No data available		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Autoignition	No data available
Flammability (solid, gas)	No data available		
Environmental			
Octanol/Water Partition coefficient	No data available		

Section 10: Stability and Reactivity

Reactivity

- No dangerous reaction known under conditions of normal use.

Chemical stability

- Stable under normal temperatures and pressures.

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- No data available

Incompatible materials

- No data available

Hazardous decomposition products

- No data available

Section 11 - Toxicological Information

Information on toxicological effects

GHS Properties	Classification
Acute toxicity	OSHA HCS 2012 • Data lacking
Aspiration Hazard	OSHA HCS 2012 • Data lacking
Carcinogenicity	OSHA HCS 2012 • Data lacking
Germ Cell Mutagenicity	OSHA HCS 2012 • Data lacking
Skin corrosion/Irritation	OSHA HCS 2012 • Data lacking
Skin sensitization	OSHA HCS 2012 • Data lacking
STOT-RE	OSHA HCS 2012 • Data lacking
STOT-SE	OSHA HCS 2012 • Data lacking
Toxicity for Reproduction	OSHA HCS 2012 • Data lacking
Respiratory sensitization	OSHA HCS 2012 • Data lacking
Serious eye damage/Irritation	OSHA HCS 2012 • Data lacking

Potential Health Effects

Inhalation

Acute (Immediate)

- Exposure to dust may cause irritation. Processes such as cutting, grinding, crushing, or impact may result in generation of excessive amounts of airborne dusts in the workplace. Nuisance dust may affect the lungs but reactions are typically reversible.

Chronic (Delayed)

- No data available

Skin

Acute (Immediate)

- Exposure to dust may cause mechanical irritation.

Chronic (Delayed)

- No data available.

Eye

Acute (Immediate) | Exposure to dust may cause mechanical irritation. Excessive concentrations of nuisance dust in the workplace may reduce visibility and may cause unpleasant deposits in eyes.

Chronic (Delayed) | No data available.

Ingestion

Acute (Immediate) | Excessive concentrations of nuisance dust in the workplace may cause mechanical irritation to mucous membranes.

Chronic (Delayed) | No data available.

Section 12 - Ecological Information

Toxicity

| Material data lacking.

Persistence and degradability

| Material data lacking.

Bioaccumulative potential

| Material data lacking.

Mobility in Soil

| Material data lacking.

Other adverse effects

| No studies have been found.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste | Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste | Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class (es)	Packing group	Environmental hazards
DOT	NDA	Not Regulated	NDA	NDA	NDA
TDG	NDA	Not Regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not Regulated	NDA	NDA	NDA

Special precautions for user | None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | No data available

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications | None

State Right To Know				
Component	CAS	MA	NJ	PA
Aluminum oxide	1344-28-1	Yes	Yes	Yes
Magnesium oxide	1309-48-4	Yes	Yes	Yes
Sodium aluminate	1302-42-7	No	No	No

Inventory				
Component	CAS	Canada DSL	Canada NDSL	TSCA
Aluminum oxide	1344-28-1	Yes	No	Yes
Magnesium oxide	1309-48-4	Yes	No	Yes
Sodium aluminate	1302-42-7	Yes	No	Yes

Canada**Labor****Canada - WHMIS - Classifications of Substances**

• Sodium aluminate	1302-42-7	E
• Magnesium oxide	1309-48-4	Uncontrolled product according to WHMIS classification criteria
• Aluminum oxide	1344-28-1	Uncontrolled product according to WHMIS classification criteria

Canada - WHMIS - Ingredient Disclosure List

• Sodium aluminate	1302-42-7	Not Listed
• Magnesium oxide	1309-48-4	1 %
• Aluminum oxide	1344-28-1	1 %

United States**Environment****U.S. - CERCLA/SARA - Section 313 - Emission Reporting**

• Sodium aluminate	1302-42-7	Not Listed
• Magnesium oxide	1309-48-4	Not Listed
• Aluminum oxide	1344-28-1	1.0 % de minimis concentration (fibrous forms)

United States - Pennsylvania**Labor****U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List**

• Sodium aluminate	1302-42-7	Not Listed
• Magnesium oxide	1309-48-4	Not Listed
• Aluminum oxide	1344-28-1	

Section 16 - Other Information

Last Revision Date | 22/December/2014

Preparation Date

| 01/June/2009

Disclaimer/Statement of Liability

| The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release. Reno Refractories 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.

Key to abbreviations

NDA = No data available
