Safety Data Sheet

Zinc Carbonate Solid **MRD-209**

* * * Section 1 - Chemical Product and Company Identification * * *

Product Identifier:
Zinc Carbonate Solid

Chemical Name
Zinc Carbonate Solid

Recommended Use
Various Industrial Applications

Distributed by:
Rocky Mountain Reagents
SCIENTIFIC SOLUTIONS SINCE 1951
4621 Technology Drive, Golden, CO 80403
ph: (303) 762-0800 fax: (303) 762-1240

Manufacturer Information
MINERAL RESEARCH & DEVELOPMENT
5910 Pharr Mill Road
Harrisburg, NC 28075

Phone: 704-455-4811
FAX: 704-454-7390
CHEMTREC: (800) 424-9300
US and Canadian Shipping Only- 1-703-527-3887

General Comments
NOTE: Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

* * * Section 2 – Hazard Identification * * *

GHS Classification
Serious Eye Damage/Eye Irritation- Category 2B
Germ Cell Mutagenicity- Category 2
Specific Target Organ Toxicity- Single Exposure- Category 1
Specific Target Organ Toxicity- Single Exposure- Category 1

GHS Label Elements

Symbol(s)

Signal Word -
Danger

Hazard Statements
Causes skin irritation.
Causes serious eye irritation.
Suspected of causing genetic defects.
Causes damage to organs.
Causes damage to organs through prolonged or repeated exposure.

Precautionary Statements

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep/Store away from clothing/combustible materials. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product.

Response

IF IN EYES: 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.

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see label). In case of fire: Use appropriate media for extinction.

Storage

Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

* * * Section 3 - Composition / Information on Ingredients * * *

CAS #	Component	Percent
12122-17-7	Basic zinc carbonate, $Zn_5(CO_3)_2(OH)_6$	100

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Zinc compounds, Zinc (7440-66-6), Nuisance particulates.

Component Information/Information on Non-Hazardous Components

This product is considered hazardous (Irritant) under 29 CFR 1910.1200 (Hazard Communication). This product is considered hazardous under the criteria specified in the Canadian Workplace Hazardous Materials Information System (WHMIS).

* * * Section 4 - First Aid Measures * * *

Description of Necessary Measures

First Aid: Eyes

Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists get medical attention.

First Aid: Skin

For skin contact, wash immediately with soap and water. If irritation persists get medical attention.

First Aid: Ingestion

Give 1-2 glasses of water. Do not induce vomiting unless directed to do so by medical personnel. If ingestion of a large amount does occur, seek medical attention.

First Aid: Inhalation

If symptoms are experienced, remove source of contamination or move victim to fresh air. Call a physician if symptoms develop or persist.

First Aid: Notes to Physician

Provide general supportive measures and treat symptomatically.

* * * Section 5 - Fire Fighting Measures * * *

General Fire Hazards

Not expected to be a fire hazard unless fine dusts are generated.

Hazardous Combustion Products

Decomposition may yield oxides of zinc. Carbon monoxide and carbon dioxide.

Extinguishing Media

Dry chemical, foam, carbon dioxide, water fog.

Fire Fighting Equipment/Instructions

Fire fighters should wear full-face, self-contained breathing apparatus and impervious protective clothing.

NFPA Ratings: Health: 1 **Fire:** 1 **Reactivity:** 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

* * * Section 6 - Accidental Release Measures * * *

Containment Procedures

Contain the discharged material. Block any potential routes to water systems. If sweeping of a contaminated area is necessary, use a dust suppressant agent.

Clean-Up Procedures

Sweep up or gather material and place in appropriate container for disposal. Avoid the generation of dusts during clean-up. Collect dust or particulates using a vacuum cleaner with a HEPA filter. Flush area with water to remove trace residue. Wear appropriate protective equipment and clothing during clean-up.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

Wear a dust mask if dust is generated above exposure limits. Regulations vary. Consult local authorities before disposal.

* * * Section 7 - Handling and Storage * * *

Handling Procedures

Avoid getting this material into contact with your skin and eyes. Do not breathe fumes or dust from this material. Wash hands after handling and before eating.

Storage Procedures

Store in a cool, dry, well-ventilated area. Keep the container tightly closed.

* * * Section 8 - Exposure Controls / Personal Protection * * *

Component Exposure Limits

ACGIH:	10 mg/m3 TWA (inhalable fraction); 3 mg/m3 TWA (respirable fraction) (These values are for particulate matter containing no asbestos and <1% crystalline silica) (related to Particulates not otherwise classified (PNOC))
OSHA Vacated:	total dust: 15 mg/m3 TWA; respirable fraction: 5 mg/m3 TWA (related to Particulates not otherwise regulated)
OSHA Final:	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction) (related to Particulates not otherwise regulated)
NIOSH:	see Appendix D (related to Particulates not otherwise regulated)

Engineering Controls

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear dust goggles.

Personal Protective Equipment: Skin

Use impervious gloves.

Personal Protective Equipment: Respiratory

If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

Personal Protective Equipment: General

Eyewash fountains and emergency showers are recommended.

* * * Section 9 - Physical & Chemical Properties * * *

Appearance: White solid
Physical State: Solid
Vapor Pressure: Not Determined
Boiling Point: Not Determined
Solubility (H2O): Insoluble
Flash Point: Not Applicable
Upper Flammable Limit (UFL): Not Applicable
Auto Ignition: Not Available
Rate of Burning: Not Applicable

Odor: Odorless
pH: Not Applicable
Vapor Density: Not Determined
Melting Point: Decomposes @ 572ºF (300ºC)
Specific Gravity: 4.398
Method Used: Not Applicable
Lower Flammable Limit (LFL): Not Applicable
Flammability Classification: Not Applicable

* * * Section 10 - Chemical Stability & Reactivity Information * * *

Chemical Stability

Stable under normal conditions.

Chemical Stability: Conditions to Avoid

Avoid extreme heat and contact with incompatible materials

Incompatibility

This product may react with strong acids.

Hazardous Decomposition

Upon decomposition, this product emits carbon monoxide, carbon dioxide, and zinc oxides.

Hazardous Polymerization

Will not occur.

* * * Section 11 - Toxicological Information * * *

Acute and Chronic Toxicity

A: General Product Information

Inhalation of zinc oxide fumes may cause metal fume fever, a flu-like illness generally lasting 24 hours or less.

B: Component Analysis - LD50/LC50

No LD50/LC50's are available for this product's components.

Carcinogenicity

A: General Product Information

No carcinogenicity data available for this product.

B: Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

A: General Product Information

No additional information available.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Basic zinc carbonate (12122-17-7)

Test & Species		Conditions
LC50 (96 hr) fathead minnow	6400 - 10,900 ug/L	100 mg CaCO3/L
LC50 (96 hr) rainbow trout	4800 - 7200 ug/L	juveniles, 333 - 504 mg CaCO3/L
LC50 (96 hr) bluegill	5400 ug/L	20 mg CaCO3/L (related to Zinc)
IC50 (96 hr) freshwater algae (Selenastrum capricornutum)	30 ug/L	(related to Zinc)
LC50 (72 hr) water flea	5 - 14 ug/L	30 ºC (related to Zinc)

Environmental Fate

No additional information available.

* * * Section 13 - Disposal Considerations * * *

US EPA Waste Number & Descriptions

A: General Product Information

Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

B: Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

* * * Section 14 - Transportation Information * * *

US DOT Information

Shipping Name: Not regulated for transportation.

Canada Transportation of Dangerous Goods Information

Shipping Name: Not regulated for transportation.

International Maritime Dangerous Goods Information

Shipping Name: Not regulated for transportation.

* * * Section 15 - Regulatory Information * * *

US Federal Regulations

A: General Product Information

Note: The statutory RQ listed below is for zinc compounds. A final RQ for Basic zinc carbonate has not yet been assigned. Zinc has a final RQ = 1000 pounds (454 kg).

B: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Basic zinc carbonate (12122-17-7)

SARA 313: form R reporting required for 1.0% de minimis concentration; Chemical Category N982 (related to Zinc compounds)

CERCLA: statutory RQ = 1 pound (0.454 kg) (related to Zinc compounds)

C: Federal Insecticide, Fungicide, and Rodenticide Act

No information is available.

SARA 311/312: Acute Health: Yes **Chronic Health:** No **Fire:** No **Pressure:** No **Reactive:** No

State Regulations

A: General Product Information

Other state regulations may apply. Check individual state requirements.

B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Basic zinc carbonate (¹related to Zinc compounds) (²related to Zinc)	12122-17-7	Yes¹	Yes²	Yes²	No	Yes²	Yes²

Component Analysis - WHMIS IDL

All components are on the Canadian Domestic Substances or Non-Domestic Substances Inventory Lists.
No components are listed in the WHMIS IDL.

WHMIS Classification: D2B - Irritation

Additional Regulatory Information

A: General Product Information

No additional information available.

B: Component Analysis - Inventory

Component	CAS #	TSCA	DSL	NDSL	EINECS	AUST	MITI	PHIL	KOREA	ELINCS	CHINA	CAN
Basic zinc carbonate	12122-17-7	Yes	Yes	No	Yes	Yes	Yes	No	No	No	Yes	DSL

* * * Section 16 - Other Information * * *

Summary of Changes

New SDS: 08/06/2014

Key / Legend

ACGIH = American Conference of Governmental Industrial Hygienists; **AU** = Australia; **BOD** - Biochemical Oxygen Demand; **C** - Celsius; **CA** - Canada; **CAS** = Chemical Abstracts Service; **CERCLA** = Comprehensive Environmental Response, Compensation, and Liability Act; **CFR** = Code of Federal Regulations; **CN** = China; **CPR** = Controlled Products Regulations; **DOT** = Department of Transportation; **DSL** = Domestic Substances List; **EINECS** = European Inventory of Existing Commercial Chemical Substances; **ELINCS** = European List of Notified Chemical Substances; **EmS** = Emergency Response Procedures for Ships Carrying Dangerous Goods; **EPA** = Environmental Protection Agency; **EU** = European Union; **F** - Fahrenheit; **HEPA** = High Efficiency Particulate Air; **HMIS** = Hazardous Material Information System; **HPV** – High Production Volume Chemical (EU); **IARC** = International Agency for Research on Cancer; **IATA** = International Air Transport Association; **ICL** – In Commerce List (Canada); **IDL** - Ingredient Disclosure List; **IDLH** - Immediately Dangerous to Life and Health; **JP** = Japan; **KR** = Korea; **LEL** - Lower Explosive Limit; **MITI** = Japan Ministry of International Trade and Industry; **mg/Kg** = milligrams per Kilogram; **mg/L** = milligrams per Liter; **mg/m^3** = milligrams per Cubic Meter; **MSHA** = Mine Safety and Health Administration; **NA** = Not Applicable or Not Available; **NFPA** = National Fire Protection Association; **NIOSH** = National Institute for Occupational Safety and Health; **NJTSR** = New Jersey Trade Secret Registry; **NDSL** = Non-Domestic Substances Inventory; **NTP** = National Toxicology Program; **NZ** = New Zealand; **OSHA** = Occupational Safety and Health Administration; **PH** = Philippines; **RCRA** = Resource Conversation & Recovery Act; **RQ** = Reportable Quantity; **SARA** = Superfund Amendments and Reauthorization Act; **STEL** = Short Term Exposure Limit; **TDG** = Transport Dangerous Goods; **TSCA** = Toxic Substances Control Act; **TWA** - Time Weighted Average; **UEL** - Upper Explosive Limit; **US** - United States; **WHMIS** = Workplace Hazardous Materials Information System.

Other Information

Disclaimer: Supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Safety Data Sheet before handling product.

End of Sheet MRD-209