

# 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

### 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

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

### GHS Label Elements

#### Symbol(s)



#### Signal Word -

Danger

#### Hazard Statements

Causes skin irritation.  
Causes eye irritation.

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Suspected of causing genetic defects.  
Causes damage to organs.  
Causes damage to organs through prolonged or repeated exposure.

## Precautionary Statements

### Prevention

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 exposed or concerned: Get medical advice/attention.  
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 (OR HAIR): Rinse skin with water/shower. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.  
IF INHALED: If inhaled, remove person to fresh air and keep comfortable for breathing. If symptoms persists: Get medical advice/attention.  
IF SWALLOWED: Rinse mouth. Do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.

### 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 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

#### Eye Contact

IF IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists get medical

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attention.

## Skin Contact

IF ON SKIN (or hair): Rinse immediately with soap and water. Take off contaminated clothing and wash it before reuse. If irritation persists get medical attention.

## Ingestion

IF SWALLOWED: 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.

## Inhalation

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

## 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.

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## \*\*\* 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

#### Zinc Carbonate (12122-17-7)

ACGIH: 10 mg/m<sup>3</sup> TWA (inhalable fraction); 3 mg/m<sup>3</sup> TWA (respirable fraction) (These values are for particulate matter containing no asbestos and <1% crystalline silica) (related to Particulates not otherwise classified (PNOC))

OSHA total dust: 15 mg/m<sup>3</sup> TWA; respirable fraction: 5 mg/m<sup>3</sup> TWA (related to Particulates not otherwise regulated)

Vacated: otherwise regulated)

OSHA Final: 15 mg/m<sup>3</sup> TWA (total dust); 5 mg/m<sup>3</sup> TWA (respirable fraction) (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 ventilation is not sufficient to effectively prevent buildup of large quantities of dust or prolonged exposure is possible, appropriate approved NIOSH respiratory protection must be provided. Respirators should be selected by and used under the direction of a trained health and safety professional following the requirements found in OSHA's respirator standard (29 CFR 1901.134) and ANSI's standard for respiratory protection (Z88.2-1992), applicable U.S. regulations, or the Canadian CSA Standard Z94.4-93 and applicable standards of Canadian Provinces. A written respiratory protection program, including provisions for medical certification, training, fit-testing, exposure assessments, maintenance, inspection, cleaning, and convenient, sanitary storage, must be implemented.

#### Personal Protective Equipment: General

Eyewash fountains and emergency showers are recommended.

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

<b>Appearance:</b>	White solid	<b>Odor:</b>	Odorless
<b>Physical State:</b>	Solid	<b>Odor Threshold:</b>	Not Applicable
<b>Vapor Pressure:</b>	Not available	<b>pH:</b>	Not Applicable
<b>Vapor Density:</b>	Not available	<b>Specific Gravity:</b>	4.398
<b>Boiling Point / Boiling Range:</b>	Not available	<b>Evaporation Rate:</b>	Not available
<b>Melting Point / Freezing Point:</b>	Decomposes @ 572 °F (300 °C) / Not available	<b>Relative Density:</b>	Not available
<b>Solubility (H<sub>2</sub>O):</b>	Insoluble	<b>Auto-ignition Temperature:</b>	Not available
<b>Flash Point:</b>	Not Flammable	<b>Decomposition Temperature:</b>	Not available
<b>Upper Flammable Limit (UFL):</b>	Not Applicable	<b>Lower Flammable Limit (LFL):</b>	Not Applicable
<b>Viscosity:</b>	Not available	<b>Partition Coefficient (n-octanol / water):</b>	Not available
<b>Flammability:</b>	Not available		

## \*\*\* 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 Toxicity

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

### Component Analysis - LD50/LC50

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

### Information on Likely Routes of Exposure

#### Inhalation

No data available.

#### Ingestion

No data available.

#### Skin Contact

No data available.

#### Eye Contact

No data available.

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## Immediate Effects

No data available.

## Delayed Effects

No data available.

## Medical Conditions Aggravated by Exposure

No data Available.

## Irritation/Corrosivity Data

No data available.

## Respiratory Sensitization

No data available.

## Dermal Sensitization

No data available.

## Germ Cell Mutagenicity

No data available for the mixture.

## Carcinogenicity

### Component Carcinogenicity

This product not listed as carcinogens by ACGIH, NIOSH, or IARC.

## Reproductive Toxicity

No information available for the product.

## Specific Target Organ Toxicity - Single Exposure

No information available for the product.

## Specific Target Organ Toxicity - Repeated Exposure

No information available for this product.

## Aspiration Hazard

No information available for the product.

*** Section 12 - Ecological Information ***
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## 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	6,400 - 10,900 ug/L	100 mg CaCO <sub>3</sub> /L
LC50 (96 hr) rainbow trout	4,800 - 7,200 ug/L	juveniles, 333 - 504 mg CaCO <sub>3</sub> /L
LC50 (96 hr) bluegill	5,400 ug/L	20 mg CaCO <sub>3</sub> /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 °C (related to Zinc)

## Environmental Fate

No additional information available.

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## \*\*\* 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

#### 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: RQ = 1,000 pounds (2,200 kg) (related to Zinc compounds)

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

### Federal Insecticide, Fungicide, and Rodenticide Act

No information is available.

### State Regulations

#### A: General Product Information

Other state regulations may apply. Check individual state requirements.

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## 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 ( <sup>1</sup> related to Zinc compounds) ( <sup>2</sup> related to Zinc)	12122-17-7	Yes <sup>1</sup>	Yes <sup>2</sup>	Yes <sup>2</sup>	No	Yes <sup>2</sup>	Yes <sup>2</sup>

No components are listed on the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).

## Component Analysis - WHMIS IDL

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which fall under WHMIS criteria specified in the Controlled Products Regulations and present above the threshold limits listed on the IDL. No components are listed in the WHMIS IDL.

## WHMIS Classification

D2B

## Additional Regulatory Information

### A: General Product Information

No additional information available.

### B: Component Analysis - Inventory

Component	CAS #	TSCA	DSL	NDSL	EINECS	AU	MITI	PH	KR	ELINCS	CN
Basic zinc carbonate	12122-17-7	Yes	Yes	No	Yes	Yes	Yes	No	No	No	Yes

\* \* \* Section 16 - Other Information \* \* \*

## Summary of Changes

New SDS: 08/06/2014; Revised 05/04/2015 v1.3; 3-year review 01/29/2019 v.1.5

## 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<sup>3</sup>** = 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



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Registry; **NDSL** = Non-Domestic Substances Inventory; **NTP** = National Toxicology Program; **NZ** = New Zealand; **OSHA** = Occupational Safety and Health Administration; **PH** = Philippines; **RCRA** = Resource Conservation & 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