

## SAFETY DATA SHEET

Creation Date 02-Feb-2010

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Revision Number 7

### 1. Identification

**Product Name** Calcium carbonate  
**Cat No. :** C64-3, C64-500  
**CAS No** 471-34-1  
**Synonyms** Precipitated chalk; Aragonite; Agricultural limestone  
**Recommended Use** Laboratory chemicals.  
**Uses advised against** Food, drug, pesticide or biocidal product use.

#### Details of the supplier of the safety data sheet

##### Company

Fisher Scientific Company  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

**Emergency Telephone Number** CHEMTREC®, Inside the USA: 800-424-9300  
CHEMTREC®, Outside the USA: 001-703-527-3887

### 2. Hazard(s) identification

#### Classification

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

#### Label Elements

##### **Hazard Statements**

##### **Precautionary Statements**

##### **Hazards not otherwise classified (HNOC)**

None identified

### 3. Composition/Information on Ingredients

| Component         | CAS No   | Weight % |
|-------------------|----------|----------|
| Calcium carbonate | 471-34-1 | >95      |

#### 4. First-aid measures

|  |  |
|--|--|
| <b>Eye Contact</b>                         | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.          |
| <b>Skin Contact</b>                        | Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.  |
| <b>Inhalation</b>                          | Remove to fresh air. Get medical attention immediately if symptoms occur. If not breathing, give artificial respiration. |
| <b>Ingestion</b>                           | Do NOT induce vomiting. Get medical attention.   |
| <b>Most important symptoms and effects</b> | No information available.  |
| <b>Notes to Physician</b>                  | Treat symptomatically  |

#### 5. Fire-fighting measures

|   |                          |
|---|--------------------------|
| <b>Unsuitable Extinguishing Media</b>   | No information available |
| <b>Flash Point</b>                      | No information available |
| <b>Method -</b>                         | No information available |
| <b>Autoignition Temperature</b>         | No information available |
| <b>Explosion Limits</b>                 |                          |
| <b>Upper</b>                            | No data available        |
| <b>Lower</b>                            | No data available        |
| <b>Sensitivity to Mechanical Impact</b> | No information available |
| <b>Sensitivity to Static Discharge</b>  | No information available |

#### Specific Hazards Arising from the Chemical

Containers may explode when heated. Thermal decomposition can lead to release of irritating gases and vapors.

#### Hazardous Combustion Products

None known.

#### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### NFPA

**Health**  
2

**Flammability**  
0

**Instability**  
0

**Physical hazards**  
N/A

#### 6. Accidental release measures

|                                  |  |
|----------------------------------|--|
| <b>Personal Precautions</b>      | Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.  |
| <b>Environmental Precautions</b> | Should not be released into the environment. See Section 12 for additional Ecological Information. |

**Methods for Containment and Clean Up** Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

## 7. Handling and storage

|                 |   |
|-----------------|---|
| <b>Handling</b> | Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation. |
| <b>Storage.</b> | Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Strong oxidizing agents. Acids.  |

## 8. Exposure controls / personal protection

### Exposure Guidelines

| Component         | ACGIH TLV | OSHA PEL | NIOSH IDLH  | Mexico OEL (TWA) |
|-------------------|-----------|----------|---|------------------|
| Calcium carbonate |           |          | TWA: 10 mg/m <sup>3</sup><br>TWA: 5 mg/m <sup>3</sup> |                  |

### Legend

NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal Protective Equipment

|                                 |   |
|---------------------------------|---|
| <b>Eye/face Protection</b>      | Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.   |
| <b>Skin and body protection</b> | Wear appropriate protective gloves and clothing to prevent skin exposure.   |
| <b>Respiratory Protection</b>   | 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 if irritation or other symptoms are experienced. |
| <b>Hygiene Measures</b>         | Handle in accordance with good industrial hygiene and safety practice.  |

## 9. Physical and chemical properties

|   |                           |
|---|---------------------------|
| <b>Physical State</b>                         | Powder Solid              |
| <b>Appearance</b>                             | White                     |
| <b>Odor</b>                                   | Odorless                  |
| <b>Odor Threshold</b>                         | No information available  |
| <b>pH</b>                                     | 7 - 9 @ 20°C              |
| <b>Melting Point/Range</b>                    | 825 °C / 1517 °F          |
| <b>Boiling Point/Range</b>                    | No information available  |
| <b>Flash Point</b>                            | No information available  |
| <b>Evaporation Rate</b>                       | Not applicable            |
| <b>Flammability (solid,gas)</b>               | No information available  |
| <b>Flammability or explosive limits</b>       |                           |
| <b>Upper</b>                                  | No data available         |
| <b>Lower</b>                                  | No data available         |
| <b>Vapor Pressure</b>                         | No information available  |
| <b>Vapor Density</b>                          | Not applicable            |
| <b>Specific Gravity</b>                       | No information available  |
| <b>Solubility</b>                             | Slightly soluble in water |
| <b>Partition coefficient; n-octanol/water</b> | No data available         |
| <b>Autoignition Temperature</b>               | No information available  |
| <b>Decomposition Temperature</b>              | 825 °C                    |
| <b>Viscosity</b>                              | Not applicable            |

Molecular Formula C Ca O3  
Molecular Weight 100.09

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

**Stability** Stable under normal conditions.

**Conditions to Avoid** Incompatible products. Excess heat. Avoid dust formation.

**Incompatible Materials** Strong oxidizing agents, Acids

**Hazardous Decomposition Products** None under normal use conditions

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

### Acute Toxicity

#### Product Information Component Information

| Component         | LD50 Oral                 | LD50 Dermal                                | LC50 Inhalation                           |
|-------------------|---------------------------|--|---|
| Calcium carbonate | LD50 = 6450 mg/kg ( Rat ) | > 2000 mg/kg (Rat)<br>(OECD Guideline 402) | > 3 mg/L 4h (Rat)<br>(OECD Guideline 403) |

**Toxicologically Synergistic Products** No information available

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Irritation** No skin irritation No eye irritation

**Sensitization** Did not cause sensitization on laboratory animals

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component         | CAS No   | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|-------------------|----------|------------|------------|------------|------------|------------|
| Calcium carbonate | 471-34-1 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** Not mutagenic in AMES Test

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known

**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

### Ecotoxicity

| Component         | Freshwater Algae | Freshwater Fish   | Microtox   | Water Flea |
|-------------------|------------------|-------------------|------------|------------|
| Calcium carbonate | Not listed       | LC50 > 56 g/L/96h | Not listed | Not listed |

**Persistence and Degradability** Insoluble in water

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Is not likely mobile in the environment due its low water solubility.

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

**DOT** Not regulated

**TDG** Not regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated

## 15. Regulatory information

### United States of America Inventory

| Component         | CAS No   | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|-------------------|----------|------|---|-----------------------------|
| Calcium carbonate | 471-34-1 | X    | ACTIVE  | -                           |

#### **Legend:**

**TSCA** US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

**TSCA 12(b)** - Notices of Export Not applicable

### International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component         | CAS No   | DSL | NDSL | EINECS    | PICCS | ENCS | ISHL | AICS | IECSC | KECL     |
|-------------------|----------|-----|------|-----------|-------|------|------|------|-------|----------|
| Calcium carbonate | 471-34-1 | X   | -    | 207-439-9 | X     | X    | X    | X    | X     | KE-04487 |

**KECL** - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

### U.S. Federal Regulations

**SARA 313** Not applicable

**SARA 311/312 Hazard Categories** See section 2 for more information

**CWA (Clean Water Act)** Not applicable

**Clean Air Act** Not applicable

**OSHA - Occupational Safety and** Not applicable

Health Administration

**CERCLA** Not applicable**California Proposition 65** This product does not contain any Proposition 65 chemicals.**U.S. State Right-to-Know Regulations** Not applicable**U.S. Department of Transportation**

Reportable Quantity (RQ): N

DOT Marine Pollutant N

DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security** This product does not contain any DHS chemicals.**Other International Regulations****Mexico - Grade** No information available**Authorisation/Restrictions according to EU REACH**

| Component         | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|-------------------|---|---|---|
| Calcium carbonate | -   | Use restricted. See item 75. (see link for restriction details)               | -   |

<https://echa.europa.eu/substances-restricted-under-reach>

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

| Component         | CAS No   | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|-------------------|----------|----------|------------------------------|---------------------------|--|
| Calcium carbonate | 471-34-1 | Listed   | Not applicable               | Not applicable            | Not applicable                             |

| Component         | CAS No   | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|-------------------|----------|---|--|----------------------------|------------------------------------|
| Calcium carbonate | 471-34-1 | Not applicable  | Not applicable   | Not applicable             | Not applicable                     |

## 16. Other information

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**Disclaimer**

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 a guidance for safe handling, use, processing, storage,

transportation, disposal and release and is not to be considered a warranty or quality specification. 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

**End of SDS**