Material Safety Data Sheet
Calcium carbonate

ACC# 03880

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Calcium carbonate  
**Catalog Numbers:** AC124670000, AC124670010, AC124670025, AC219160000, AC219160010, AC219160025, AC219165000, AC403790000, AC403790020, AC403790030, AC403800000, AC403805000, AC403810000, AC403815000, AC423510000, AC423515000, S71684, S71684-1, S71922, S71922-1, S71922-2, S75768, S75769, 60152306, C63-10, C63-3, C64-3, C64-500, NC9004432  
**Synonyms:** Precipitated chalk; Aragonite; Agricultural limestone; Agstone; Bell mine pulverized limestone; Calcite; Dolomite; Franklin; Boiling chips.  
**Company Identification:**  
Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410  
**For information, call:** 201-796-7100  
**Emergency Number:** 201-796-7100  
**For CHEMTRECE assistance, call:** 800-424-9300  
**For International CHEMTREC assistance, call:** 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>471-34-1</td>
<td>Calcium carbonate</td>
<td>&gt;99</td>
<td>207-439-9</td>
</tr>
</tbody>
</table>

**Hazard Symbols:** XI  
**Risk Phrases:** 36

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: white solid. May cause kidney damage. May cause central nervous system effects.  
**Warning!** Causes eye, skin, and respiratory tract irritation.  
**Target Organs:** Kidneys, central nervous system.

**Potential Health Effects**  
**Eye:** May cause eye irritation.  
**Skin:** Causes skin irritation.  
**Ingestion:** Ingestion of large amounts may cause gastrointestinal irritation. Expected to be a low ingestion hazard.  
**Inhalation:** Low hazard for usual industrial handling. Excessive inhalation may cause minor respiratory irritation.  
**Chronic:** Chronic ingestion may cause hypercalcemia, alkalosis, and kidney damage. May also

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11/29/2004
produce "milk-alkali syndrome" characterized by neurological symptoms such as irritability, lethargy, stupor, and coma.

Section 4 - First Aid Measures

**Eyes**: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin**: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

**Ingestion**: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid.

**Inhalation**: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

**Notes to Physician**: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

**General Information**: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Non-combustible, substance itself does not burn but may decompose upon heating to produce irritating, corrosive and/or toxic fumes.

**Extinguishing Media**: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

**Flash Point**: Not applicable.

**Autoignition Temperature**: Not applicable.

**Explosion Limits, Lower**: Not available.

**Upper**: Not available.

**NFPA Rating**: (estimated) Health: 1; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

**General Information**: Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks**: Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

**Handling**: Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid breathing dust.

**Storage**: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from strong acids.
Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium carbonate</td>
<td>10 mg/m³ TWA (particulate matter containing no asbestos and &lt; 1% crystalline silica)</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: Calcium carbonate: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: 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.

Skin: Wear appropriate gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Appearance: white

Odor: odorless

pH: 8-9 (solution)

Vapor Pressure: Not available.

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: 825 deg C (dec)

Decomposition Temperature: 825 deg C

Solubility: Slightly soluble in water.

Specific Gravity/Density: 2.7-2.9

Molecular Formula: CaCO₃

Molecular Weight: 100.09

Section 10 - Stability and Reactivity

Chemical Stability: Stable.

Conditions to Avoid: Dust generation, moisture, high humidity.

Incompatibilities with Other Materials: Will ignite on contact with fluorine; incompatible with acids, alum, ammonium salts and mercury + hydrogen.

Hazardous Decomposition Products: Calcium oxide.
**Hazardous Polymerization:** Has not been reported.

**Section 11 - Toxicological Information**

RTECS#: 
CAS# 471-34-1: FF9335000

LD50/LC50: 
CAS# 471-34-1: 
Draize test, rabbit, eye: 750 ug/24H Severe;  
Draize test, rabbit, skin: 500 mg/24H Moderate;  
Oral, rat: LD50 = 6450 mg/kg;

**Carcinogenicity:** 
CAS# 471-34-1: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

**Epidemiology:** No information found.

**Teratogenicity:** No information found.

**Reproductive Effects:** No information found.

**Neurotoxicity:** No information found.

**Mutagenicity:** No information found.

**Other Studies:** See actual entry in RTECS for complete information.

**Section 12 - Ecological Information**

**Ecotoxicity:** No data available. This chemical is expected to cause no oxygen depletion in aquatic systems. It has a low potential to affect aquatic organisms. Acute aquatic effects: 48-hour LC50; Mosquito fish: 56,000 mg/L.

**Environmental:** This chemical released into the environment will not have a significant impact.

**Physical:** No information available.

**Other:** No information available.

**Section 13 - Disposal Considerations**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

**Section 14 - Transport Information**

<table>
<thead>
<tr>
<th></th>
<th>US DOT</th>
<th>IATA</th>
<th>RID/ADR</th>
<th>IMO</th>
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</thead>
<tbody>
<tr>
<td><strong>Shipping Name:</strong></td>
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<td></td>
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<tr>
<td><strong>Hazard Class:</strong></td>
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</table>
Section 15 - Regulatory Information

US FEDERAL

TSCA
CAS# 471-34-1 is listed on the TSCA inventory.

Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.

Section 12b
None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.

SARA

CERCLA Hazardous Substances and corresponding RQs
None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPQ.

SARA Codes
CAS # 471-34-1: acute.

Section 313
No chemicals are reportable under Section 313.

Clean Air Act:
This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.

STATE
CAS# 471-34-1 is not present on state lists from CA, PA, MN, MA, FL, or NJ.
California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:
XI

Risk Phrases:
R 36 Irritating to eyes.

Safety Phrases:
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 39 Wear eye/face protection.

WGK (Water Danger/Protection)

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11/29/2004
CAS# 471-34-1: 0

Canada - DSL/NDSL
CAS# 471-34-1 is listed on Canada's DSL List.

Canada - WHMIS
This product has a WHMIS classification of D2B.

Canadian Ingredient Disclosure List
CAS# 471-34-1 is not listed on the Canadian Ingredient Disclosure List.

Exposure Limits
CAS# 471-34-1 (listed as calcium carbonate): OEL-AUSTRALIA:TWA 10 mg/m3
3 OEL-BELGIUM:TWA 10 mg/m3 OEL-FRANCE:TWA 10 mg/m3 OEL-THE NETHERLAND
3 OEL: TWA 10 mg/m3 OEL-RUSSIA:TEL 6 mg/m3 OEL-SWITZERLAND:TWA 6 mg/m3
(resp. dust) OEL-UNITED KINGDOM:TWA 10 mg/m3 (total dust) JAN9 OEL-
UNITED KINGDOM:TWA 5 mg/m3 (resp. dust) OEL IN BULGARIA, COLOMBIA, JO
RDAN, KOREA check ACGIH TLV OEL IN NEW ZEALAND, SINGAPORE, VIETNAM ch
eck ACGI TLV

Section 16 - Additional Information

MSDS Creation Date: 11/19/1998
Revision #5 Date: 4/12/2004

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