



Material Safety Data Sheet Calcium carbonate, ACS

Section 1 - Chemical Product and Company Identification

MSDS Name:

Calcium carbonate, ACS

Catalog Numbers:

LC12690

Synonyms:

Precipitated chalk, aragonite, agricultural limestone, calcite, dolomite, franklin.

Company Identification:

LabChem, Inc.
200 William Pitt Way
Pittsburgh, PA 15238

Company Phone Number:

(412) 826-5230

Emergency Phone Number:

(800) 424-9300

CHEMTREC Phone Number:

(800) 424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
471-34-1	Calcium carbonate	100%

Section 3 - Hazards Identification

Emergency Overview

Appearance: *white solid*

Warning! Causes eye, skin, and respiratory tract irritation. May cause central nervous system effects. May cause kidney damage.

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 industrial use. Excessive inhalation may cause minor respiratory irritation.



Material Safety Data Sheet Calcium carbonate, ACS

Chronic:

Chronic ingestion may cause hypercalcemia, alkalosis, and kidney damage. May also 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 lids until no evidence of chemical remains. Get medical aid at once.

Skin:

Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops.

Ingestion:

Do not induce vomiting. If victim is conscious, give 2-4 glasses of water or milk. Get medical aid at once.

Inhalation:

Give artificial respiration if necessary. Move victim to fresh air. Keep victim warm and at rest. Get medical aid at once.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

Irritating and highly toxic gases may be generated by thermal decomposition or combustion. Substance is non-combustible but may decompose upon heating to produce irritating, corrosive, or toxic gases. Move container if possible; avoid breathing vapors or dust.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Autoignition Temperature:

No information found.

Flash Point:

No information found.

NFPA Rating:

Health-1; flammability-0; reactivity-0

Explosion Limits:

Lower: n/a Upper: n/a

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. Clean up spills immediately. Avoid creating airborne particles. Provide ventilation.



Material Safety Data Sheet Calcium carbonate, ACS

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Avoid breathing dust, vapor, mist, or gas.

Storage:

Store capped at room temperature. Protect from heat and incompatibles.

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 general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Calcium carbonate	10 mg/m ³ TWA (particulate matter containing no asbestos and <1% crystalline silica)	10 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable dust) (listed under calcium carbonate)	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction) (listed under calcium carbonate)

OSHA Vacated PELs:

Calcium carbonate: No OSHA Vacated PELs are listed.

Personal Protective Equipment

Eyes:

Do not wear contact lenses when working with chemicals. An eye wash fountain should be available in the immediate work area. Wear appropriate protective eyeglasses or chemical safety goggles as described in 29 CFR 1910.133.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Solid
Color: White
Odor: Odorless
pH: 8-9 (solution)



Material Safety Data Sheet Calcium carbonate, ACS

Vapor Pressure:	Not available
Vapor Density:	Not available
Evaporation Rate:	Not available
Viscosity:	Not available
Boiling Point:	Not available
Freezing/Melting Point:	825°C (decomposes)
Decomposition Temperature:	825°C
Solubility in water:	Slightly soluble in water
Specific Gravity/Density:	2.7 – 2.9 (Water = 1)
Molecular Formula:	CaCO ₃
Molecular Weight:	100.09

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal storage and handling conditions.

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 mg/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, NTP, or CA Proposition 65.

Epidemiology:

No information available.

Teratogenicity:

No information available.

Reproductive:

No information available.

Mutagenicity:

No information available.

Neurotoxicity:

No information available.



Material Safety Data Sheet Calcium carbonate, ACS

Section 12 - Ecological Information

No information found. 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.

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Not regulated.

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

US Federal

TSCA:

CAS# 471-34-1 is listed on the TSCA inventory. Does not have a Significant New Use Rule.

SARA Reportable Quantities (RQ):

CAS# 471-34-1 does not have a RQ.

CERCLA/SARA Section 313:

Not reportable under Section 313.

OSHA - Highly Hazardous:

Not considered highly hazardous by OSHA.

US State

State Right to Know:

CAS# 471-34-1 is listed on the following state right to know lists: Pennsylvania, Minnesota, and Massachusetts.

California Regulations:

Not listed.

European/International Regulations

Canadian DSL/NDSL:

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

Canada Ingredient Disclosure List:

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



Material Safety Data Sheet
Calcium carbonate, ACS

Section 16 - Other Information

MSDS Creation Date: July 24, 2006

Revision Date: None

Information in this MSDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and LabChem Inc. assumes no liability resulting from the use of this MSDS. The user must determine suitability of this information for his application.