MATERIAL SAFETY DATA SHEET (MSDS)
CALCIUM CARBONATE
(CACO3)

Calcium carbonate is a natural, high purity mineral which is produced with the most advanced technology. Raw material is carefully purified and selected from Quynh Luu district, Nghe An province which is considered the best area in Vietnam And Southeast Asia. High purity Calcium Carbonate is being used as filler in increasing rates in variety industries including Plastics, Paper, Rubber, Paint, Water Treatment, etc…

1. Product Identification

Product name: Calcium Carbonate
Product code: PM-400
Synonyms: Calcite; lime stone
CAS No: 471-34-1
Molecular Weight: 100.09
Chemical Formula: $CaCO_3$

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Calcium Carbonate	471-34-1	100%	No

3. Hazard Identification

Emergency Overview
CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT, NUISANCE, DUST.
SAF-T-DATA(tm) Rating provided here for your convenience)

Health Rating \: 1- Slight (Life)
Flammability Rating: 1-Slight
Reactivity Rating: 1- Slight
Contact Rating: 1- Slight
Lab Protective Equip: GOGGLES, LAB COAT, VENT HOOD, PROPER GLOVES
Storage Color Code: White (general storage)

Potential Health Effects

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Inhalation:
Excessive concentrations of a nuisance dust may cause nuisance condition such as coughing, sneezing and nasal irritation
Ingestion:
Non-toxic
Skin Contact:
Not expected to be a health hazard from skin exposure
Eye Contact:
No information found, but presumed to cause mechanical irritation.
Chronic Exposure:
Excessive oral doses of calcium carbonate may produce alkalosis and hypocalcaemia.
Aggravation of Pre-existing Conditions:
No information found.

4. First Aid Measures

Inhalation:
Remove to fresh air. Get medical attention for any breathing difficulty.
Ingestion:
If large amounts are swallowed, give water to drink and get medical advice.
Skin contact:
Wash exposed area with soap and water. Get medical advice if irritation develops.
Eye Contact:
Wash Thoroughly with running water. Get medical advice if irritation develops.

5. Fire protection Measures

Fire:
Not considered to be a fire hazard.
Explosion:
Not considered to be explosion hazard.
Fire extinguishing Media:
Use any means suitable for extinguishing surrounding fire.
Special Information:
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

6. Accidental release measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8.Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

7. Handling and storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure controls/ Personal protection

Airborne Exposure limits:
-OSHA Permissible Exposure Limit (PEL):
15mg/m3 total dust, 5mg/m3 reparable fraction for nuisance dusts.
-ACGIH Threshold Limit Value (TLV)
For particulates (insoluble or poorly soluble) not otherwise specified (PNOS):
3mg/m3 reparable particles and 10 mg/m3 in valuable particles.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emission of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of recommended.
Practices, most recent edition, for details.
Personal Respirators (NIOSH Approved)
If the exposure limit is exceeded and engineering controls are not feasible, a half face piece particulate respirator(NIOSH type N95 or better filters) may be worn for up to ten times the exposures limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest…A full face piece particulate respirator(NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerin, etc.) are present, use a full-face piece positive – pressure, air-supplied respirator.
WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres

Skin Protection:

Gloves and lab coat, apron or overalls.

Eye protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical Properties and chemical Composition

Appearance

Fine, white powder.

Odor:

Odorless

Solubility:
0.001gm in100 ml water, soluble in dilute acids.
Density:
2.65-2.72
PH:
8-10
Boiling Point:
Not applicable
Melting Point:
1330 °C
Vapor density (Air=1)
No information found.
Vapor Pressure (mm Hg)
No information found.
Evaporation rate (BuAc=1)
No information found.
Chemical composition:
$CaCO_3$: ≥ 98%
FeO_3: ≤ 0.3%
Al_2O_3: ≤ 0.3%
SiO_2 : ≤ 0.2%
$MgCO_3$: ≤ 0.95%
Na_2O: ≤ 0.2%

10. Stability and Reactivity

Stable under ordinary conditions of use and storage.
Hazardous Decomposition Products:
When heated to decomposition (825C), emits calcium oxide fumes and liberates carbon dioxide.
Hazardous Polymerization:
Will not occur.
Incompatibilities:
Acids, fluorine, magnesium with hydrogen.
Conditions to avoid:
Heat, incompatibles.

11. Toxicological Information

No LD50/LC50 information found relating to normal routes of occupational exposure.

-/Cancer List/

	---NTP Carcinogen---		
Ingredient	Known	Anticipated	IARC Category
Calcium carbonate (471-34-1)	No	No	None

12. Ecological Information

Environmental Fate:
No information found.
Environmental Toxicity:
No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

US DOT Information
Shipping name: None necessary.
Additional Info. : None.
International Transportation Regulations: This product is not regulated as hazardous material by the United States (DOT) or Canadian (TDG) transportation regulations.
Transport by sea: Not restricted.
Air Transport: Not restricted

15. Other Information

NFPA Ratings: Health: 0 Flammability: 0 Reactivity: 0
Label Hazard Warning:
CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.NUISANCE DUST.
Label Precautions:
Avoid contact with eyes, skin and clothing.
Wash thoroughly after handling. Avoid breathing dust.
Keep container closed. Use with adequate ventilation.
Label First Aid:
In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. If irritation develops call a physician. If inhaled, remove to fresh air. Get medical attention for any breathing difficulty
Revision Information:
No Changes.
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