



MATERIAL SAFETY DATA SHEET (MSDS) CALCIUM CARBONATE

Date of Compilation: 14/01/2021

MSDS No: CC010

Version: 1.10

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Calcitic Limefeed

Chemical Component: Calcium Carbonate

Chemical Formula: CaCO₃

Synonyms: Calcite, Precipitated chalk, Agricultural limestone, Aragonite

Company Information: Hidrox Mineral Processors, 4542 Dr Eugene Muller Street, Swakopmund, Namibia, matthew@hidroxmp.com/christian@hidroxmp.com, +264818200122/+264811249313

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient: Calcium Carbonate

Percentage by weight: 88% - 96%

SECTION 3: HAZARD(S) IDENTIFICATION

WARNING: May cause eye irritation. May cause skin and respiratory tract infection.

Potential Health Effects

Eye: May cause eye irritation

Skin: May cause 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.

Potential Chronic Health Effects: Chronic ingestion may cause hypercalcemia, alkalosis, and kidney damage.

SECTION 4: FIRST AID MEASURES

General: Take off contaminated clothing. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

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. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical assistance if irritation occurs.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give artificial respiration if necessary. Keep victim warm and at rest. Get medical assistance at once.

Skin: Wash with plenty of soap and water. Wash contaminated clothing before reuse. Get medical assistance if irritation develops.

Ingestion: Do NOT induce vomiting. If victim is conscious, give 2-4 glasses of water or milk. Get medical assistance.

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 and full protective gear.

Suitable extinguishing media: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media: Do not use a heavy water stream.

Special Remarks on Fire Hazards: Will ignite and burn fiercely in contact with fluorine.

Special Remarks on Explosion Hazards: When a mixture of calcium carbonate and magnesium is heated in a current of hydrogen, a violent explosion occurs.

Advice for firefighters:

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

Environmental precautions: Should not be released into the environment.

Methods and material for containment and cleaning up: Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling: Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area. Protect from heat and incompatibles

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Appropriate engineering controls: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Ensure good ventilation of the work station.

Personal protective equipment: Safety glasses. Gloves. Dust formation: dust mask.

Hand and skin protection: Wear protective gloves. Wear appropriate protective clothing to prevent skin exposure.

Eye protection: 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.

Respiratory protection: Dust formation: dust mask.

Other information: Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid

Appearance: White powder or lumps

Colour: White

Odour: None

pH: 8-9 (solution)

Melting point: 825 °C

Freezing point: No data available

Boiling point: No data available

Relative evaporation rate (butyl acetate=1): No data available

Flammability (solid, gas): Non- flammable

Vapor pressure: No data available

Relative density: No data available

Specific gravity / density: 2.93 g/cm³

Molecular mass: 100.09 g/mol

Solubility: Water: 0.00153 g/100ml

Auto-ignition temperature: No data available

Decomposition temperature: 825 °C

Viscosity, kinematic: No data available

Viscosity, dynamic: No data available

Explosion limits: No data available

Explosive properties: No data available

Oxidizing properties: No data available

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Dust generation, moisture.

Incompatibilities with Other Materials: Strong oxidizing agents, acids, aluminium, magnesium, fluorine.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, calcium oxide.

Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 6450 mg/kg [Rat].

Chronic Effects on Humans: May cause damage to the following organs: kidneys.

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Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Acute Potential Health Effects: Skin: Causes skin irritation. Eyes: Dust causes eye irritation. Inhalation: Excessive inhalation causes respiratory tract and mucous membrane irritation. Low hazard for usual industrial handling. Ingestion: Ingestion of large amounts may cause gastrointestinal tract disturbances with nausea and possibly constipation. Expected to be a low hazard for usual industrial handling. Chronic Potential Health Effects: Chronic ingestion may affect kidneys, and may cause hypercalcemia with alkalosis.

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.

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

Physical: No information available.

Other: Do not empty into drains. May have some potential to bioaccumulate.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Contaminated Packaging: Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use empty containers.

Sewage disposal-relevant information: Do not empty into drains.

Remarks: Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

SECTION 14: TRANSPORT INFORMATION

Not regulated.

SECTION 15: REGULATORY INFORMATION

National Environmental Management: Air Quality Act, 39 of 2004: Maximum allowable dust emissions.

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Mine Health and Safety Act, 29 of 1996: The personal protective equipment to be worn.

Fertilisers, Farm Feeds, Agricultural Remedies and stock remedies Act, 36 of 1947

SANS 9001:2015 (ISO 9001:2015) – Quality Management Systems.

SECTION 16: OTHER INFORMATION

Indication of changes relative to MSDS:

SECTION	PREVIOUS ENTRY	REVISED ENTRY	VERSION	SAFETY RELEVANT

SECTION 17: DISCLAIMER

The information provided in this MSDS is correct to the best of our knowledge, information and belief at the date of its publication and represents the best information currently available to us. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and no warranty, express or implied, or quality specification is made and **Hidrox Mineral Processors** assumes no liability resulting from the use of this MSDS. The user must determine suitability of this information for his application. 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.