



MATERIAL SAFETY DATA SHEET

Name of Product:

ALPINE N-Cal[®]

Product #: F 104
Revision Date: January 26, 2018

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ALPINE N-Cal
SYNONYMS: 9-0-0-11
PRODUCT CODES: F 104

MANUFACTURER: NACHURS ALPINE SOLUTIONS[®]
DIVISION: New Hamburg
ADDRESS: 30 Neville Street, New Hamburg, ON N3A 4G7 CANADA
PHONE: 1-519-662-2352

EMERGENCY PHONE: 1-877-378-7745 (QM)
CHEMTREC PHONE: 1-800-424-9300 (US)
CANUTEC: 1-613-996- 6666 (CANADA)
FAX PHONE: N/A

CHEMICAL NAME: Calcium Nitrate Decahydrate
CHEMICAL FAMILY: Inorganic
CHEMICAL FORMULA: $\text{Ca}(\text{NO}_3)_2 \cdot 10\text{H}_2\text{O}$

PRODUCT USE: Manufacturer of fertilizers, pharmaceuticals, lubricants, household cleaners

PREPARED BY: NACHURS ALPINE SOLUTIONS[®]

SECTION 1 NOTES:

SECTION 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Use with Caution!

ROUTES OF ENTRY: Injection, Ingestion, Inhalation, absorption

POTENTIAL HEALTH EFFECTS

EYES:	May cause eye irritation and redness.
SKIN:	May cause skin irritation and redness (irritant and permeator).
INGESTION:	Moderate to severe irritation with may lead to nausea, vomiting or diarrhea.
INHALATION:	May cause respiratory irritation.

ACUTE HEALTH HAZARDS: Risk of Nitrate Toxicity.

CHRONIC HEALTH HAZARDS: Prolonged exposure may result in skin burns and ulceration. Over-exposure through inhalation may cause respiratory irritation.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: No information available.

CARCINOGENICITY:

OSHA:	No data established
ACGIH:	No data established
NTP:	No data established
IARC:	No data established
OTHER:	N/A

SECTION 2 NOTES:

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT: Nitrogen: 9%
Calcium: 11%

CAS NO.: Calcium Nitrate: 10124-37-5 66-72%
Water 7732-18-5 28-34%

% WT: 100%
% VOL: N/A

SARA 313 REPORTABLE: N/A
pmm: N/A
mg/m3: N/A

OSHA PEL-TWA: N/A
OSHA PEL STEL: N/A
OSHA PEL CEILING: N/A

ACGIH TLV-TWA: N/A
ACGIH TLV STEL: N/A
ACGIH TLV CEILING: N/A

SECTION 3 NOTES:

SECTION 4: FIRST AID MEASURES

EYES: Flush with plenty of water for 15 minutes, keeping eyelids open. Seek medical attention.
SKIN: Wash skin with plenty of mild soap and water. If irritation persists, seek medical attention.
INGESTION: Seek medical attention. Risk of Nitrate Toxicity. Do not induce vomiting. If spontaneous vomiting should occur, lean head below hips to prevent aspiration of liquid into the lungs.
INHALATION: Remove to fresh air. If discomfort continues, seek medical attention.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: N/A

SECTION 4 NOTES:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR: UPPER: N/A
(% BY VOLUME) LOWER: N/A

FLASH POINT: N/A
F°: N/A
C°: N/A

METHOD USED: N/A

AUTOIGNITION TEMPERATURE: N/A
F°: N/A
C°: N/A

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NFPA HAZARD CLASSIFICATION:

HEALTH: 1
FLAMMABILITY: 0
REACTIVITY: 1
OTHER: None

HMIS HAZARD CLASSIFICATION

HEALTH: 1
FLAMMABILITY: 0
REACTIVITY: 1
PROTECTION:

EXTINGUISHING MEDIA:

Not combustible. If material is involved in a fire, use water spray or dry agent (carbon dioxide or dry chemical powder).

SPECIAL FIRE FIGHTING PROCEDURES:

Keep containers cool with water spray. Wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

UNUSUAL FIRE AND EXPLOSION HAZARDS: N/A

HAZARDOUS DECOMPOSITION PRODUCTS: Nitric Oxide and Oxygen

SECTION 5 NOTES:

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:

In the case of small and large spills, isolate the spill to a contained area such as a dike or sump. Maximize recovery or absorb with an inert material (sand/kitty litter) and place in a suitable container. Reuse material (if possible) or dispose of product appropriately. Clean up residue with plenty of water.

SECTION 6 NOTES:

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SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Make sure container is tightly closed when not in use. Check regularly for leaks. Store in a cool, dry and well-ventilated area and away from incompatible substances such as organics and ammonia.

OTHER PRECAUTIONS: Always use good safety and industrial hygienic practices. Remove contaminated clothing and wash before reuse. Work upwind or increase ventilation and avoid breathing in vapours.

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use adequate general and local exhaust ventilation to keep airborne concentrations to a minimum.

VENTILATION: Adequate ventilation recommended.

RESPIRATORY PROTECTION: Use suitable respirator if misted or sprayed.

EYE PROTECTION: Wear safety glasses to prevent eye contact due to splashing.

SKIN PROTECTION: Not required (rubber or PVC gloves recommended for prolonged exposure). Wear waterproof apron if splash or spill is likely.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: N/A

WORK HYGIENIC PRACTICES: Wash hands thoroughly after handling.

EXPOSURE GUIDELINES: See Section 3.

SECTION 8 NOTES:

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, colourless liquid

ODOR: None

PHYSICAL STATE: Liquid

pH AS SUPPLIED: 5.0-8.0
pH (Other):

BOILING POINT: Approximately the same as water
F°: 212°C
C°: 100°C

SALT-OUT POINT: @
F: 5°F
C: -15°C

VAPOR PRESSURE (mmHg) @ N/A

VAPOR DENSITY (AIR = 1)@ N/A

SPECIFIC GRAVITY (H2O = 1) 1.45-1.47

EVAPORATION RATE: N/A

BASIS (=1):

SOLUBILITY IN WATER: Complete

PERCENT SOLIDS BY WEIGHT: 66-72%

PERCENT VOLATILE: N/A
BY WT N/A
BY VOL @F°: N/A
C°: N/A

VOLATILE ORGANIC COMPOUNDS (VOC): N/A
WITH WATER LBS/GAL: N/A
WITHOUT WATER LBS/GAL: N/A

MOLECULAR WEIGHT: 164.088 g/mol

VISCOSITY: Same as water

SECTION 9 NOTES:

SECTION 10: STABILITY AND REACTIVITY

	STABLE	UNSTABLE
STABILITY:	x	
CONDITIONS TO AVOID (STABILITY):	Do not allow product to dry.	
INCOMPATIBILITY (MATERIAL TO AVOID):	Aluminum, Zinc, galvanized iron and combustible materials. Incompatible with organic chemicals, ammonia.	

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HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Nitrous Oxide and oxygen

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID (POLYMERIZATION): N/A

SECTION 10 NOTES:

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: No data available for this product. For major ingredients:

Calcium Nitrate (100%)- LC50 (Oral, Rat): 3900 mg/kg
LC50 (Oral, Mouse): 302 mg/kg

OTHER: Ingestion of large quantities of nitrates will cause methaemoglobinemia with headaches, heart beat irregularities, blood pressure loss, cramps and breathing difficulties. Cyanosis will occur. Nephritis (kidney inflammation) can result from chronic exposure.

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Do not allow to enter drinking water. This product is a fertilizer solution. Release of large quantities into a body of water can substantially alter the nutrient composition which can affect aquatic plants, fish and animal life. It may lead to eutrophication and algae blooms.

No data established for this product. For major ingredients:

Calcium Nitrate (100%) – LC50 (Fish, 96 hr): >100 mg/L

SECTION 12 NOTES:

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Large spills should be diked to contain the material to prevent contact with waterways and sewers. Absorb with absorbent materials and dispose in accordance with local, provincial/state and federal regulations.

RCRA HAZARD CLASS: Not Listed

SECTION 13 NOTES:

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION/TRANSPORT CANADA:

PROPER SHIPPING NAME: 9-0-0-11

HAZARD CLASS: N/A

ID NUMBER: N/A

PACKING GROUP: N/A

LABEL STATEMENT:

Health: 1 Flammability: 0 Reactivity: 1 Specific: None

WATER TRANSPORTATION:

PROPER SHIPPING NAME: 9-0-0-11

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HAZARD CLASS: N/A
ID NUMBER: N/A
PACKING GROUP: N/A
LABEL STATEMENTS:

Health: 1 Flammability: 0 Reactivity: 1 Specific: None

AIR TRANSPORTATION

PROPER SHIPPING NAME: 9-0-0-11
HAZARD CLASS: N/A
ID NUMBER: N/A
PACKING GROUP: N/A
LABEL STATEMENTS:

Health: 1 Flammability: 0 Reactivity: 1 Specific: None

OTHER AGENCIES:

SECTION 14 NOTES:

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

TSCA (TOXIC SUBSTANCE CONTROL ACT): Yes

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): No

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): N/A

311/312 HAZARD CATEGORIES: 5.1

313 REPORTABLE INGREDIENTS: Calcium Nitrate

STATE REGULATIONS:

INTERNATIONAL REGULATIONS:

CANADA FEDERAL REGULATIONS:

WHMIS CLASSIFICATIONS

DSL (Domestic Substance List): Not Regulated
Calcium Nitrate: Yes

SECTION 15 NOTES:

SECTION 16: OTHER INFORMATION

OTHER INFORMATION:

PREPARATION INFORMATION: *Technical Services Department*

DISCLAIMER: The information contained herein is offered only as a guide to the handling of this specific material and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive and the manner and conditions of use and handling may involve other and additional considerations. No warranty of any kind is given or implied and Alpine Plant Foods Limited will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein. This

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Material Safety Data Sheet is valid for three years.