



MATERIAL SAFETY DATA SHEET

Name of Product:

ALPINE Double-OK™

Product #: F 6
Revision Date: March 1, 2013

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ALPINE Double-OK
SYNONYMS: 0-0-30
PRODUCT CODES: F 6

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

EMERGENCY PHONE: 1-877-324-4402 (I TECH)
CHEMTREC PHONE: 1-800-424-9300 (US)
CANUTEC: 1-613-996- 6666 (CANADA)
FAX PHONE: N/A

CHEMICAL NAME: Potassium Carbonate, Liquid
CHEMICAL FAMILY: Alkali
CHEMICAL FORMULA: K_2CO_3

PRODUCT USE: Manufacture of Fertilizers

PREPARED BY: NACHURS ALPINE SOLUTIONS®

SECTION 1 NOTES:

SECTION 2: HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW: Use with Care! Avoid breathing vapours or mist. Avoid contact with eyes, skin and clothing.

ROUTES OF ENTRY: Inhalation, Ingestion, Injection, Absorption

POTENTIAL HEALTH EFFECTS

EYES: May cause severe irritation which may lead to permanent eye damage.
SKIN: May be irritating to the skin.
INGESTION: May cause gastrointestinal irritation. Ingesting large quantities may cause ulcerations, vomiting and death from shock.
INHALATION: May be irritating to the respiratory tract.

ACUTE HEALTH HAZARDS: See above.

CHRONIC HEALTH HAZARDS: None Known

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None Reported.

CARCINOGENICITY:

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

SECTION 2 NOTES:

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT:	Potassium:	30%	
CAS NO.:	Potassium Carbonate:	584-08-7	44%
	Water:	7732-18-5	56%
% WT:	100%		
% VOL:			
SARA 313 REPORTABLE:	N/A		
pmm:			
mg/m3:			
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. (seek medical attention if necessary).
SKIN:	Wash skin with mild soap and water. Flush skin for 15 minutes. If irritation persists, seek medical attention.
INGESTION:	Rinse mouth and drink lots of water. Do not induce vomiting. If spontaneous vomiting should occur, lean head below hips to prevent aspiration of liquid into lungs. Seek medical attention immediately.
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: (% BY VOLUME)	UPPER:	N/A
	LOWER:	N/A
FLASH POINT:	N/A	
METHOD USED:	N/A	
AUTOIGNITION TEMPERATURE:	N/A	

NFPA HAZARD CLASSIFICATION:

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

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HMIS HAZARD CLASSIFICATION

HEALTH: 1
FLAMMABILITY: 0
REACTIVITY: 0
PROTECTION:

EXTINGUISHING MEDIA: Use media suitable for surrounding fire

SPECIAL FIRE FIGHTING PROCEDURES: If carbon dioxide is released, use an approved self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: High temperatures due to fire or mixing with acid can cause this material to decompose releasing carbon dioxide gas.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide is generated when reacted with acids. Large quantities of carbon dioxide in an enclosed area will result in lack of oxygen and possible suffocation.

SECTION 5 NOTES:

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Confine the spill to a diked area or sump, if possible, and recover as much of the liquid potassium carbonate as possible or absorb with inert materials (sand, kitty litter). Place in suitable containers and dispose of properly.

SECTION 6 NOTES:

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Store in suitable containers away from heat source or reactive materials. Store in a tightly closed container and in a dry, cool and well-ventilated area.

OTHER PRECAUTIONS: Avoid breathing mist. General safety and industrial hygienic practices should always be followed. Remove contaminated clothing and wash before reuse.

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use adequate general and local exhaust ventilation to keep airborne concentrations below exposure limits.

VENTILATION: Provide adequate ventilation for local areas.

RESPIRATORY PROTECTION: Respiratory protection not normally required unless excessive heat or reaction occurs resulting in release of carbon dioxide. In enclosed spaces, this carbon dioxide can displace oxygen causing possible suffocation, thus use self contained breathing apparatus. Do not use air purifying respirators.

EYE PROTECTION: Safety goggles and face shield.

SKIN PROTECTION: Rubber or plastic gloves

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: N/A

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WORK HYGIENIC PRACTICES: Wash hands thoroughly after handling.

EXPOSURE GUIDELINES: See Section 3.

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, nearly colorless liquid.

ODOR: Odorless

PHYSICAL STATE: Liquid

pH AS SUPPLIED: 10.8-12
pH (Other):

BOILING POINT:

F°: >200°F
C°: >93.3°C

MELTING POINT:

F°: 15°F
C°: -9.4°C

FREEZING POINT:

F°: 15°F
C°: -9.4°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: 44%

PERCENT VOLATILE: N/A

BY WT

BY VOL @F°:

C°:

VOLATILE ORGANIC COMPOUNDS (VOC): 0%

WITH WATER LBS/GAL:

WITHOUT WATER LBS/GAL:

MOLECULAR WEIGHT: 138.2 g/mol

VISCOSITY: Same as water

SECTION 9 NOTES:

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SECTION 10: STABILITY AND REACTIVITY

	STABLE	UNSTABLE
STABILITY:	x	
CONDITIONS TO AVOID (STABILITY):	Excessive heat or contact with acids.	
INCOMPATIBILITY (MATERIAL TO AVOID):	Acidic materials and excessive heat. Avoid contact with heat to prevent formation of corrosive potassium hydroxide (KOH). Avoid prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys.	
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:	Carbon dioxide is generated when reacted with acids. Large quantities of carbon dioxide in an enclosed area will result in lack of oxygen and possible suffocation. Potassium oxides.	
HAZARDOUS POLYMERIZATION:	Will not occur	
CONDITIONS TO AVOID (POLYMERIZATION):	N/A	

SECTION 10 NOTES:

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: LD50 (Oral, Rat): 1870 mg/kg
LD50 (Oral, Mouse): 2570 mg/kg

When applied to the skin of guinea pigs, did not elicit any dermal sensitization reactions.

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.

SECTION 12 NOTES:

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Disposal of fertilizers may be subject to federal, provincial/state, and local regulations. Users of this product should review their operations in terms of applicable federal, provincial/state, and local laws and regulations, then consult with appropriate regulatory agent before discharging or disposing.

RCRA HAZARD CLASS:

SECTION 13 NOTES:

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SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION:TRANSPORTATION CANADA

PROPER SHIPPING NAME: Potassium Carbonate

HAZARD CLASS: N/A

ID NUMBER: N/A

PACKING GROUP: N/A

LABEL STATEMENT:

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

WATER TRANSPORTATION:

PROPER SHIPPING NAME: Potassium Carbonate

HAZARD CLASS: N/A

ID NUMBER: N/A

PACKING GROUP: N/A

LABEL STATEMENTS:

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

AIR TRANSPORTATION

PROPER SHIPPING NAME: Potassium Carbonate

HAZARD CLASS: N/A

ID NUMBER: N/A

PACKING GROUP: N/A

LABEL STATEMENTS:

Health: 1 Flammability: 0 Reactivity: 0 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: N/A

313 REPORTABLE INGREDIENTS: Potassium Carbonate

STATE REGULATIONS:

INTERNATIONAL REGULATIONS:

CANADA FEDERAL REGULATIONS:

WHMIS CLASSIFICATIONS: Not Regulated

DSL (Domestic Substance List): Potassium Carbonate: Yes

SECTION 15 NOTES:

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SECTION 16: OTHER INFORMATION

OTHER INFORMATION:

PREPARATION INFORMATION: Technical Services Department

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