

MATERIAL SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY INFORMATION

Trade Name (as labeled): Poly-Foliant V
Herbicide Defoliant – Desiccant
EPA Reg. No. 49517-3

Chemical Name Sodium Chlorate NaClO₃ + Urea (fire retardant)

Manufactured By: CoreAgri, LLC
PO Box 1027
Arroyo Grande, California 93421

Business Phone: (805) 201-9049

Emergency Phone: INFOTRAC – (800) 535-5053

Date of Preparation: July, 2009

SECTION 2. COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Name	CAS #	WT%	ACGIH TVL (ppm)	OSHA PEL (ppm)	NTP/IARC/OSHA
Sodium Chlorate	7775-09-9	45	NA	NA	Oxidizer
Inert Ingredients Contains Urea as a fire retardant	N/A	55	N/A	N/A	Non Hazardous

SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Emergency Overview:

Sodium chlorate is a mucous membrane irritant. It primarily causes eye, skin, respiratory, and digestive tract irritation. Ingestion affects the functioning of the blood along with head and stomach aches, and vomiting.

CAUTION: Keep out of reach of children.

Route(s) of Entry: Eyes, Inhalation, Skin, and Ingestion

SECTION 3. EMERGENCY/HAZARDS OVERVIEW CONTINUED

Hazardous Material Information Rating System:

(0 = least; 1 = slight; 2 = moderate; 3 = high; 4 = extreme)

Health (blue)	2
Flammability (red)	0
Reactivity (yellow)	1

SECTION 4. FIRST-AID MEASURES

<u>If Inhaled:</u>	Remove to fresh air. If breathing becomes difficult, contact a medical physician. Give artificial respiration if victim is not breathing and obtain immediate medical attention.
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<u>If Ingested:</u>	Call physician or Poison Control Center immediately for most current information. Dilute with large amounts of milk or water. Do not induce vomiting unless directed to do so by a medical professional. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. If vomiting occurs, keep head lower than hips to prevent introduction of fluid into the lungs.
<u>In Case Of Skin Contact:</u>	Wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse. Seek medical attention if skin becomes irritated.
<u>In Case Of Eye Contact:</u>	Flush immediately with water for at least 15 minutes, lifting the upper and lower eyelids occasionally. Call a physician if eye irritation persists.
Victims of chemical exposure and all rescuers must be taken for medical attention. Take a copy of label and MSDS to physician or health professional with victim.	

SECTION 5. FIRE-FIGHTING MEASURES

Flash Point:	Non-flammable.
LEL Flammable Limits:	Non-flammable.
UEL Flammable Limits:	Non-flammable.
Autoignition Temperature:	Non-flammable.
Extinguishing Media:	Non-flammable liquid. Use media suitable to extinguish source of fire.
Unusual Fire and Explosion Hazards:	The product as packaged is non-flammable. Urea is added as a fire retardant.
Special Firefighting Procedures:	In case of fire: use water as the extinguishing media, smothering type extinguishers are not recommended. Wear full protective clothing and self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Spill And Leak Response: For small or incidental spills, the minimum personal protective equipment should be rubber gloves, rubber apron, and chemical goggles. Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. Gas masks with ammonia canister or SCBA gear may be required. For large spills, contain by diking with soil or other non-combustible absorbent material. Keep material out of sewers, storm drains, and surface waters. Comply with all applicable government regulations on spill reporting, handling, and waste disposal.

SECTION 7. STORAGE AND HANDLING

Storage Practices: Store in a cool (above 32°F), dry, well-ventilated area away from incompatible materials. This product should be stored in tanks constructed of stainless steel, fiberglass, polypropylene, or polyethylene. Valves should be inspected on a regular basis and replaced as needed to prevent leakage. Transfer equipment should be constructed of stainless steel or chemical-resistant plastic.

Handling Practices: Keep away from incompatible materials such as reducing agents or combustible materials. Do not breathe mists. Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Wash with soap and water after handling.

Work/Hygiene Practices: Avoid getting chemicals ON YOU or IN YOU. Wash hands with soap and water after handling chemicals.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Always wash thoroughly after handling.

Ventilation/Engineering Controls: Use with adequate ventilation to keep airborne levels below recommended exposure limits.

Respiratory Protection: If work conditions generate vapors or mist, wear a NIOSH approved respirator appropriate for those emission levels. Appropriate respirator may be a full facepiece respirator, an SCBA in the pressure demand mode, or a supplied-air respirator.

Eye Protection: Chemical dust/splash goggles or full-face shield to prevent eye contact. As a general rule, contact lenses should not be worn when working with chemicals because they contribute to the severity of an eye injury.

Hand Protection: Rubber gloves with gauntlets.

Body Protection: Use body protection appropriate for task. Chemical-resistant coveralls and rubber aprons are generally acceptable.

Other Protective Measures: An eyewash and safety shower should be nearby and ready for use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<u>Appearance:</u>	Clear liquid.	<u>Boiling Point:</u>	>212 °F.
<u>Odor:</u>	Odorless.	<u>Melting Point:</u>	NA
<u>pH:</u>	8 to 9	<u>Freezing Point:</u>	<32°F
<u>Water Solubility:</u>	100%.	<u>Vapor Pressure:</u>	NA
<u>Density:</u>	11.6 lbs/gallon.	<u>Vapor Density (air = 1):</u>	NA.
<u>Specific Gravity (H₂O = 1):</u>	1.391		NA = Not Available.

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable under standard conditions

Conditions To Avoid: High temperatures, pressure, and fire conditions.

Incompatibility: Strong acids, organic substances, sulfur, powder metals, amine and ammonia compounds

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Free oxygen and chlorine dioxide under fire conditions

SECTION 11. TOXICOLOGICAL INFORMATION

Oral Acute Toxicity: (sodium chlorate) LD₅₀ (rat) 1200mg/kg

Dermal Acute Toxicity: (rat) not determined

Inhalation Acute Toxicity: not determined

Eye Contact: May cause mild eye irritation

Skin Contact: May cause mild skin irritation

Sensitization: Not a sensitizer

Mutagenicity: No information available

Reproduction Toxicity: No information available

Carcinogenicity: No carcinogenic effects noted for sodium chlorate

SECTION 12. ECOLOGICAL INFORMATION

Summary of Effects: Sodium chlorate is considered non-toxic to fish. It is considered non-toxic to bees. It is practically nontoxic to birds from acute toxicity, however long-term toxicity effects results in reduced egg production and fertility.

Ecotoxicity: (sodium chlorate)

Rainbow Trout 96-hour LC₅₀ mg/l – non toxic to fish (>10,000 ml/l)

Bluegill Sunfish 96-hour LC₅₀ mg/l – non toxic to fish (>10,000 ml/l)

Bobwhite Oral LD₅₀ >mg/kg – not available, long-term resulted in reduced egg production and fertility in bird species

Mallard Oral LD50 >mg/kg – not available, long-term resulted in reduced egg production and fertility in bird species

SECTION 13. DISPOSAL CONSIDERATIONS

Do not contaminate lakes, streams, ponds, estuaries, oceans, or other waters by discharge of waste effluents or equipment rinsate. Dispose of waste effluents according to federal, state, and local regulations. Chemical additions or other alterations of this product may invalidate any disposal information in this MSDS.

SECTION 14. TRANSPORTATION INFORMATION

DOT Classification: Not regulated by DOT
 Freight classification for LTL: Desiccants/defoliant
 (NMFC Item 50320, Class 60)

SECTION 15. REGULATORY INFORMATION

Sara Title III Classification:
Section 311/312: Acute Heath
Section 313 (chemicals): Not listed
Proposition 65: Not applicable

SECTION 16. OTHER INFORMATION

The information and recommendations herein are taken from data contained in independent, industry recognized references including NIOSH, OSHA, ANSI, and NFPA. This information is, as of date listed above, true and accurate to the best of CoreAgri's knowledge. It is intended for use by persons possessing technical knowledge and at their own discretion and risk. Since actual use is beyond our control, no guarantee, express or implied, and no liability is assumed by CoreAgri, LLC in conjunction with the use of this information. Actual conditions of use and handling may require consideration of information other than, or in addition to, that which is provided herein.