

MATERIAL SAFETY DATA SHEET

SPROUT NIP® 7A

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

FORMULATED FOR:

LOVELAND PRODUCTS, INC.
P.O. Box 1286 • Greeley, CO 80632-1286

24-Hour Emergency Phone: 1-800-424-9300

Medical Emergencies: 1-866-944-8565

U.S. Coast Guard National Response Center: 1-800-424-8802

PRODUCT NAME: SPROUT NIP® 7A

CHEMICAL NAME: Isopropyl N- (3-chlorophenyl) carbamate; Isopropyl 3-chlorobanilate; Chlorpropham

CHEMICAL FAMILY: Carbamate

EPA REG. NO.: 34704-614

MSDS Number: 000614-12-LPI

MSDS Revisions: Sections 1, 2, 4, 11, 13, 15

Date Of Issue: 07/23/12

Supersedes: 09/09/05

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – DANGER - POISON. Fatal if swallowed or absorbed through skin. Avoid contact with eyes, skin, or clothing. Do not breathe dust, vapor, or spray mist. Methanol may cause blindness.

This product is a light amber liquid with methyl alcohol odor.

Warning Statements:

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of by gastric lavage.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Chlorpropham	78.50	101-21-3	none established
Other Ingredients, including Methanol	21.50	67-56-1	262 mg/m ³

This product is hazardous according to the OSHA Hazard Communication Standard (29 CFR 1910.1200)

4. FIRST AID MEASURES

If swallowed:	Call a poison control center or doctor immediately fore treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
If in eyes:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If on skin or clothing:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
If inhaled:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth, if possible. Call a poison control center or doctor for further treatment advice.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: **1-866-944-8565.**

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method):	67°F/19.4°C (TCC)
FLAMMABLE LIMITS (LFL & UFL):	LFL: 6.0; UFL: 36 (Methanol)
EXTINGUISHING MEDIA:	Considered flammable; dry chemical, carbon dioxide, alcohol foam, foam, water spray or fog.
HAZARDOUS COMBUSTION PRODUCTS:	Chloroaniline, isocyanates, oxides of nitrogen, chlorine-containing compounds and other unknown hazardous material may be formed. Incomplete combustion may lead to formation of carbon monoxide and/or other asphyxiants.
SPECIAL FIRE FIGHTING PROCEDURES:	Use water spray to cool containers exposed to fire. Remain upwind. Avoid breathing smoke. Wear self-contained breathing apparatus and full protective gear. Avoid using heavy streams of water.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Containers in fire may burst from excessive heat. Vapors may travel along floor and flash back. May present an explosion hazard if the lower limit of flammability is exceeded.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Release or Spill: Wear chemical safety glasses with side shields or chemical goggles, rubber gloves, rubber boots, long-sleeved shirt, long pants, head covering, and a NIOSH-approved pesticide respirator or air-supplied respirator.

For spills: Spills may be collected with absorbent material and placed in a container for proper disposal in accordance with Federal, State and Local Regulations. Prevent runoff from entering sewer drains and waterways.

7. HANDLING AND STORAGE

HANDLING: This product is used as an aerosol for treating potatoes for sprout inhibition during storage. If entry into the storage area is necessary during or immediately following application before the fog has settled, protective clothing and respirators must be worn. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove PPE immediately after handling this product. All combustible aerosols present the possibility of explosion hazard in a confined area if the lower limit for combustion is exceeded. Keep the concentration of this product below 3.7 gallons of formulation per 10,000 SCF of air.

STORAGE: Avoid storage below freezing temperatures. Storage below 35°F/1.6°C may cause crystal formation. Warming contents and agitation will restore material to useable condition, but do not warm above 140°F/60°C. At 140°F the formulation will lose methanol, the vapors of which are flammable. Notice: Vent the container before heating to prevent pressure build-up. Combustible. Keep away from heat and open flame. Do not contaminate water, food or feed by storage or disposal.

Personal Protective Equipment: Applicators and other handlers must wear: long sleeved shirt and long pants, shoes plus socks, and chemical-resistant gloves, such as or made of Barrier Laminate, Nitrile Rubber, Neoprene Rubber, Polyvinyl Chloride, or Viton®. **From the start of application and continuing until the ventilation requirements listed on the product label have been completed, for entry into the enclosed treated area, handlers must wear:** a respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or a canister with any N, R, P, or HE prefilter. If the enclosed area contains less than 19.5 percent oxygen, the respirator must be one the following types: A supplied- air respirator (MSHA/NIOSH approval number prefix TC-21C) or a self contained breathing apparatus (SCBA)(MSHA/NIOSH approval number prefix TX-13F). Follow manufacturer's instructions for cleaning and maintaining PPE. If no instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Follow manufacturer's instructions for cleaning and maintaining PPE. If no instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Local ventilation recommended. Work in well-ventilated areas. Follow label directions.

RESPIRATORY PROTECTION: Wear a NIOSH approved pesticide respirator with organic vapor cartridge and pesticide prefilter.

EYE PROTECTION: Chemical goggles or shielded safety glasses.

SKIN PROTECTION: Wear protective clothing: long-sleeved shirts and pants, hat, rubber boots with socks. Wear rubber or chemical-resistant gloves.

	OSHA PEL 8 hr TWA	ACGIH TLV-TWA
Methanol	260 mg/m ³	260 mg/m ³ [Skin]

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Light amber liquid with methyl alcohol odor.	SOLUBILITY: Miscible
SPECIFIC GRAVITY (Water = 1): 1.06-1.08 g/ml	BULK DENSITY: 8.85-9.01 lbs/gallon
VAPOR PRESSURE: (Methanol): 100mm Hg @ 25°C	BOILING POINT: 148°F/64.4°C
PERCENT VOLATILE (by volume): ±20%	EVAPORATION RATE: not established

Note: These physical data are typical values based on material tested but may vary from sample to sample.
 Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Excessive heat; ignition sources.

INCOMPATIBILITY: Strong oxidizers, acids, alkalis (bases).

HAZARDOUS DECOMPOSITION PRODUCTS: Chloroaniline, isocyanates, oxides of nitrogen, and chlorine-containing compounds may form in a fire situation.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): 4977 mg/kg	Acute Dermal LD₅₀ (rabbit): >2000 mg/kg
Eye Irritation (rabbit): Not an irritant	Skin Irritation (rabbit): Not an irritant
Inhalation LC₅₀ (rat): > 5.06 mg/L (4 hr)	Skin Sensitization (guinea pig): Non-sensitizing.

Carcinogenic Potential: Nothing listed in NTP, ACGIH or OSHA. IARC lists Chlorpropham as IARC-3 (Unclassifiable as to Human Carcinogenicity)

12. ECOLOGICAL INFORMATION

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of wastes.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: This product is acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: **CONTAINER DISPOSAL: Nonrefillable container.** Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.acrecycle.org. If not recycled, then puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

For packages up to 5 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. **For packages greater than 5 gallons and less than 56 gallons: Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. **For packages greater than 56 gallons:** To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. **For refillable containers:** Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Do not contaminate water, food or feed by storage or disposal.

14. TRANSPORT INFORMATION

DOT Shipping Description: FLAMMABLE LIQUID, N.O.S., 3, UN1993, II (METHANOL, CHLORPROPHAM) ERG GUIDE 128

U.S. Surface Freight Classification: INHIBITORS, NOI, POTATO SPROUTING (NMFC 101690; CLASS: 60)

Consult appropriate ICAO/IATA and IMDG regulations for shipment requirements in the Air and Maritime shipping modes.

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:

NFPA		HMIS			
3	Health	0	Least	3	Health
3	Flammability	1	Slight	3	Flammability
0	Instability	2	Moderate	0	Reactivity
		3	High	G	PPE
		4	Severe		

SARA Hazard Notification/Reporting

SARA Title III Hazard Category:

Immediate	<u>Y</u>	Fire	<u>Y</u>	Sudden Release of Pressure	<u>N</u>
Delayed	<u>N</u>	Reactive	<u>N</u>		

Reportable Quantity (RQ) under U.S. CERCLA: Methanol (CAS: 67-56-1): 5000 pounds.

SARA, Title III, Section 313: Methanol (CAS: 67-56-1)

RCRA Waste Code: Not listed

CA Proposition 65: Not listed.

DANGER – This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals.

16. OTHER INFORMATION

MSDS STATUS: Sections 1, 2, 4, 11, 13, 15 revised

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

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