

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® EMULSIFIABLE CONCENTRATE
CHEMICAL NAME: Isopropyl N- (3-chlorophenyl) carbamate; Isopropyl 3-chlorobanilate; Chlorpropham
CHEMICAL FAMILY: Carbamate
EPA REG. NO.: 34704-613
MSDS Number: 000613-12-LPI

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

Date of Issue: 07/23/12

Supersedes: 12/06/07

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – CAUTION - Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Do not take internally. Avoid contact with skin, eyes, or clothing. Avoid breathing of vapor or spray mist.

This product is a clear, pale yellow liquid with slight corn oil odor.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Chlorpropham	36.00	101-21-3	none established
Isopropyl Alcohol	12.75	67-63-0	492 mg/m ³
Inert Ingredients	51.25		

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 for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the 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 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 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 by 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. Have the product container or label with you when calling a poison control center or doctor.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method): 76°F/24.4°C (TCC)
FLAMMABLE LIMITS (LFL & UFL): LFL: 2.6; UFL: 12.6
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: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. The wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

STORAGE: Keep container closed. This product inhibits germination of seed potatoes. Avoid storage below freezing temperatures. Prolonged storage may cause crystal formation. Warming contents and agitation will restore material to useable condition, but do not warm above 250°F / 121.1°C. Flammable. Keep away from heat and open flame. Do not contaminate water, food or feed by storage or disposal.

Personal Protective Equipment (PPE): Mixers, loaders, applicators and all other handlers must wear: long sleeved shirt and long pants, chemical resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber or Viton® and shoes plus socks. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. **From 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.

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. Follow label directions.

EYE PROTECTION: Chemical goggles or shielded safety glasses.

SKIN PROTECTION: Wear protective clothing: long-sleeved shirts and pants, shoes plus socks. Wear chemical-resistant gloves.

	OSHA PEL 8 hr TWA	ACGIH TLV-TWA
Isopropyl Alcohol	980 mg/m ³	492 mg/m ³

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear, pale yellow liquid with slight corn oil odor.	SOLUBILITY: Emulsifies
SPECIFIC GRAVITY (Water = 1): 0.99 g/ml	BULK DENSITY: 8.26 lbs/gallon
VAPOR PRESSURE: 47.2 mm/Hg @ 20°C	BOILING POINT: 185-195°F/85.0-90.5°C
PERCENT VOLATILE (by volume): 1.84 x 10 ⁴ torr @ 25°C	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): Not a sensitizer.

Carcinogenic Potential: Nothing listed in NTP or OSHA. IARC lists Chlorpropham as IARC-3 (Unclassifiable as to Human Carcinogenicity); IARC lists Isopropanol as IARC-3 (Unclassifiable as to Human Carcinogenicity); ACGIH lists Isopropanol as TLV-A4 (Not Classifiable as a Human Carcinogen).

12. ECOLOGICAL INFORMATION

For terrestrial uses, 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: Pesticide wastes are toxic. 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: 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. 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 (ISOPROPANOL, 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
	1 Health	0 Least	1 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: Not listed

SARA, Title III, Section 313: Not listed

RCRA Waste Code: Not listed

CA Proposition 65: Not listed.

CAUTION – 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, 4, 11, 13 15 revised

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

®Sprout Nip is a registered trademark of Loveland Products, Inc.

Disclaimer and Limitation of Liability: This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and LOVELAND PRODUCTS, INC. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.