

# MATERIAL SAFETY DATA SHEET

SHELF LIFE 2 EC

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: 1-800-301-7976

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

PRODUCT NAME: SHELF LIFE 2 EC  
CHEMICAL NAME: Isopropyl N- (3-chlorophenyl) carbamate; Isopropyl 3-chlorobanilate; Chlorpropham  
CHEMICAL FAMILY: Carbamate  
EPA REG. NO.: 2749-519-34704  
MSDS Number: 2749519-07b-LPI

MSDS Revisions: Section 4

Date of Issue: 12/06/07

Supersedes: 08/10/07

## 2. HAZARDS IDENTIFICATION SUMMARY

**KEEP OUT OF REACH OF CHILDREN – CAUTION** - Causes eye irritation. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. This product may cause allergic reaction. Remove contaminated clothing and wash clothing before reuse.

This product is a pale yellow liquid with alcohol odor. Primary routes of entry are Inhalation, eye contact and skin contact.

## 3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Chlorpropham	25.00	101-21-3	none established
Isopropyl Alcohol	15.00	67-63-0	492 mg/m <sup>3</sup>
Inert Ingredients	60.00		

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

## 4. FIRST AID MEASURES

**If swallowed:** If conscious, drink large quantities of water, then induce vomiting by administering an emetic such as Ipecac syrup. If an emetic is not available, placing a finger far back in the throat should induce vomiting. Administer additional water. Take immediately to a hospital or physician. If unconscious or in convulsions, take immediately to a hospital. DO NOT attempt to induce vomiting or give anything by mouth to an unconscious person.

**If in eyes:** Flush with plenty of water for at least 15 minutes. Get medical attention.

**If on skin:** Wash with plenty of soap and water. Get medical attention.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-301-7976.

## 5. FIRE FIGHTING MEASURES

**FLASH POINT (°F/Test Method):** 86°F (30°C) / TCC

**FLAMMABLE LIMITS (LFL & UFL):** Not established

**EXTINGUISHING MEDIA:** Flammable; use 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.

## 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:** Avoid eye and skin contact. Use with ventilation and avoid breathing vapors. Wash hands before eating, drinking, chewing gum, using tobacco products or using the toilet.

**STORAGE:** Keep container closed. Store in a cool, secure place away from children. Avoid storage below freezing temperatures. This product inhibits germination of seed potatoes. Prolonged storage may cause crystal formation. Warming contents and agitation will restore material to useable condition, but do not warm above 120°F/48.9°C. Vent caps when using indirect heat such as a warm water bath. Do not use direct heat or flame. Do not contaminate water, food or feed by storage or disposal.

**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 if necessary.  
**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.

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

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>APPEARANCE AND ODOR:</b> Pale yellow liquid with alcohol odor.	<b>BULK DENSITY:</b> 8.35 lbs/gallon	<b>SOLUBILITY:</b> Slight
<b>SPECIFIC GRAVITY (Water = 1):</b> 1.0 g/ml	<b>BOILING POINT:</b> not available	<b>pH:</b> not available
<b>VAPOR PRESSURE:</b> 32.4 mm/Hg @ 20°C	<b>EVAPORATION RATE:</b> not established	
<b>PERCENT VOLATILE (by volume):</b> 25%		

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**

<b>Acute Oral LD<sub>50</sub> (rat):</b> Chlorpropham: 4200 mg/kg	<b>Acute Dermal LD<sub>50</sub> (rabbit):</b> Chlorpropham: >2000 mg/kg
<b>Eye Irritation (rabbit):</b> Slight to moderate irritant with possible corneal damage	<b>Skin Irritation (rabbit):</b> Slight irritant
<b>Inhalation LC<sub>50</sub> (rat):</b> Chlorpropham: > 0.5 mg/L (4 hr, nose only)	<b>Skin Sensitization (guinea pig):</b> Non-sensitizing.
<b>Carcinogenic Potential:</b> Nothing listed in NTP or OSHA. IARC lists Isopropanol as 3 (Unclassifiable as to Human Carcinogenicity); ACGIH lists Isopropanol as TLV-A4 (Not Classifiable as a Human Carcinogen).	

**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 disposal of equipment wash waters.

**13. DISPOSAL CONSIDERATIONS**

Do not reuse product containers. **Plastic:** Triple rinse (or equivalent), then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or by reconditioning, or 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. **Metal:** Triple rinse (or equivalent), then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. 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, N01, 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**

<b>NFPA &amp; HMIS Hazard Ratings:</b>	NFPA		HMIS
	2 Health	0 Least	2 Health
	3 Flammability	1 Slight	3 Flammability
	1 Instability	2 Moderate	1 Reactivity
		3 High	G PPE
		4 Severe	

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**SARA Hazard Notification/Reporting**

**SARA Title III Hazard Category:** Immediate Y Fire Y Sudden Release of Pressure N  
Delayed N Reactive Y

**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

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## 16. OTHER INFORMATION

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**MSDS STATUS:** Section 4 revised.

**PREPARED BY:** Registrations and Regulatory Affairs

**REVIEWED BY:** Environmental/ Regulatory Services

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