

# ISOTOX SEED TREATER F

## MATERIAL SAFETY DATA SHEET

### I. IDENTIFICATION OF PRODUCT

LOVELAND INDUSTRIES, INC.  
PO BOX 1289  
GREELEY, COLORADO 80632

EMERGENCY PHONE NUMBERS 1-800-424-9300 CHEMTREC  
1-970-356-8920 LOVELAND IND.  
CALL CHEMTREC 24 HOURS A DAY @ 1-800-424-9300

TRADE NAME: **ISOTOX SEED TREATER F**  
CHEMICAL NAME: Captan, Lindane  
CHEMICAL FAMILY: Organochlorine

### II. HAZARDOUS COMPONENTS OF MIXTURES

COMPONENT	CAS #	%	TLV(UNITS)
Lindane: Gamma Isomer of Benzene Hexachloride	58-89-9	25	0.5mg/m <sup>3</sup>
Captan & Related Derivatives	133-06-02	12.5	0.5mg/m <sup>3</sup>

### III. PHYSICAL DATA

BOILING POINT:	Not Est.	VAPOR DENSITY(AIR=1):	Not Avail.
BULK DENSITY:	30-32#/ft <sup>3</sup>	% VOLATILE BY VOL:	Not Avail.
SPECIFIC GRAVITY:	Not Est.	APPEARANCE:	Grey
SOLUBLE IN WATER:	Insoluble Non-Wettable Powder	ODOR:	Mildly Pungent Powder
VAPOR PRESSURE (mm OF Hg) @ 20 D C:		Not Est.	

### IV. FIRE & EXPLOSION HAZARD DATA

FLASH POINT (TEST METHOD):	Not Avail.
FLAMMABLE LIMITS (UEL AND LEL):	Not Avail.
EXTINGUISHING MEDIA:	Water spray, Foam, Dry Chemical, CO <sub>2</sub> .
SPECIAL FIRE FIGHTING PROCEDURES:	Smoke from fires involving this material may present unusual hazards. Avoid breathing smoke and mists. Avoid contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter the enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Read the entire Material Safety Data Sheet.
UNUSUAL FIRE AND EXPLOSION HAZARD:	None.

### V. REACTIVITY DATA

STABILITY:	Stable
CONDITIONS TO AVOID:	Decomposes at Temperatures >300°F
INCOMPATIBILITY (MATERIALS TO AVOID):	Alkaline media, sulfur and sulfur with moisture.
HAZARDOUS DECOMPOSITION PRODUCTS:	None known. Normal combustion forms carbon dioxide and water vapor and may produce oxides of sulfur and may produce toxic chlorine compounds; incomplete combustion can produce carbon monoxide.
HAZARDOUS POLYMERIZATION:	Will not occur

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## VI. HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE: May cause dizziness, blurred vision, headache, nausea, abdominal discomfort, chest discomfort and vomiting.

### EMERGENCY AND FIRST AID PROCEDURES:

EYES: Flush with water for 15 minutes, then get medical attention.

SKIN: Remove contaminated clothing. Wash with soap and water. Get medical attention if irritation persists.

INGESTION: Call a physician immediately. Drink 2 glasses of water. Induce vomiting.

INHALATION: Remove victim to fresh air. Apply artificial respiration if necessary.

CARCINOGEN STATUS: Lindane is listed by NTP as a possible carcinogen.

ADDITIONAL HEALTH DATA: This product has moderate toxicity by ingestion and by skin contact. Signs and symptoms of overexposure may include, but are not limited to headache, dizziness, nausea, loss of equilibrium, muscle spasms and difficulty in breathing. The primary response is central nervous system stimulation, resulting in hyperexcitability and convulsions, which may lead to coma and death. Chronic overexposure may produce liver and kidney damage. In a study conducted by the National Cancer Institute (NCI), male mice fed 80 ppm LINDANE in the diet for 80 weeks had increases in tumors when compared with the untreated control animals. This was not observed either in male mice fed 160 ppm of LINDANE in the diet or in female mice fed the same two dietary levels of the chemical. CAPTAN has a low order of chronic toxicity in that rodents tolerate large doses of the material. In a study done by the National Cancer Institute, CAPTAN was not carcinogenic in the rat. In two lifetime feeding studies, 6,000 to 16,000 ppm technical CAPTAN in the diet induced both benign and malignant duodenal tumors in mice. CAPTAN has been extensively studied in various mutagen testing systems. It appears to be positive in bacterial, fungal and cell studies. There is no good evidence that CAPTAN is mutagenic to mammals. Numerous studies (in mice, rats, dogs, rabbits and monkeys) have been conducted to determine whether CAPTAN causes birth defects. These studies have produced no good evidence that CAPTAN causes birth defects in mammals. Neither LINDANE or CAPTAN have been associated with cancer or other chronic toxicity in humans other than discussed above. Because of its acute toxicity, this product should be handled as outlined in this bulletin and on the product label.

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## VII. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Clean up spills immediately, observing precautions in Special Protective Information and on product label. Vacuum or sweep up material and place in disposable container. Scrub contaminated area with detergent and water using a stiff broom. Pick up liquid with Oil Dry, Kitty Litter, clay, rags or other absorbent material and place in a container for proper disposal in accordance with all Federal, State and Local Regulations.

WASTE DISPOSAL METHOD: Contaminated materials may be hazardous. Do not contaminate water, food or feed by storage or disposal. Dispose of in an approved waste disposal facility in accordance with all Federal, State and Local Regulations.

CONTAINER DISPOSAL: Triple rinse (or equivalent) adding rinse water to spray tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by the appropriate authorities.

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## VIII. SPECIAL PROTECTION INFORMATION

VENTILATION: Use adequate ventilation to keep airborne concentrations of this material below the exposure standard for CAPTAN and LINDANE.

LOCAL: Work in well ventilated area.

SPECIAL: None

MECHANICAL: Not Required.

OTHER: None

PERSONAL PROTECTIVE EQUIPMENT: **Applicators and other handlers (other than mixers and loaders) must wear:** Long-sleeved shirt and long pants, waterproof gloves, shoes plus socks, protective eyewear.

**Mixers and Loaders must wear:** Long-sleeved shirt and long pants, waterproof gloves, shoes plus socks, protective eyewear, chemical-resistant apron when mixing or loading, dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C).

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## VIII. SPECIAL PROTECTION INFORMATION (cont)

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(406)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**USER SAFETY RECOMMENDATIONS**

Users should:

- \* Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- \* Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- \* Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## IX. SPECIAL PRECAUTIONS

**PRECAUTIONS TO BE TAKEN IN STORAGE AND HANDLING:** This pesticide is toxic to fish and wildlife. Keep out of lake, ponds or streams. Do not contaminate water by cleaning of equipment or disposal of waste. Store in a cool dry place. Keep in original container, tightly closed. Do not reuse empty container.

**OTHER PRECAUTIONS:** Keep out of reach of children.

## X. REGULATORY INFORMATION

Components which could require reporting under SARA TITLE III are: Lindane and Captan

CHEMICAL	%	CAS NUMBER
Lindane	25	58-89-9
Captan	12.5	133-06-2

## SARA TITLE III HAZARD CATEGORY

IMMEDIATE:	Yes	FIRE:	No	REACTIVITY:	No
DELAYED:	Yes	SUDDEN RELEASE OF PRESSURE:	No		
FREIGHT CLASS:	ITEM 102100	CLASS	77.5		
DOT REGULATION:	12x1# RQ - ORGANOCHLORINE PESTICIDE, SOLID, TOXIC, N.O.S., 6.1, UN 2761, PG III (CONTAINS LINDANE) LTD. QTY. ERG - GUIDE 55				
	10# RQ - ORGANOCHLORINE PESTICIDE, SOLID, TOXIC, N.O.S., 6.1, UN 2761, PG III (CONTAINS LINDANE) ERG - GUIDE 55				

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