

**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:** MALICE® 2F INSECTICIDE  
**CHEMICAL NAME:** Imidacloprid: 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine  
**CHEMICAL FAMILY:** Chloronicotinyl Insecticide  
**EPA REG. NO.:** 34704-893  
**MSDS Number:** 000893-12-LPI

**MSDS Revisions:** New

**Date of Issue:** 09/24/12

**Supersedes:** New

**2. HAZARDS IDENTIFICATION SUMMARY**

**KEEP OUT OF REACH OF CHILDREN – CAUTION –** Harmful if absorbed through the skin. Avoid contact with skin, eyes, or clothing.

This product is off-white liquid with mild odor.

**3. COMPOSITION, INFORMATION ON INGREDIENTS**

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Imidacloprid	21.40	138261-41-3	not listed
Other Ingredients, including Glycerin	78.60	56-81-5	10 mg/m <sup>3</sup>

**4. FIRST AID MEASURES**

**If Swallowed:** Call a poison control center or doctor immediately for 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 to 20 minutes. 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 label or container with you when calling a poison control center or doctor, or going for treatment.

**Note to Physician:** No specific antidote is available. Treat the patient symptomatically.

**5. FIRE FIGHTING MEASURES**

**FLASH POINT (°F/Test Method):** >199°F / >93°C (PMCC)

**FLAMMABLE LIMITS (LFL & UFL):** None established

**EXTINGUISHING MEDIA:** Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**HAZARDOUS COMBUSTION PRODUCTS:** Oxides of carbon, hydrogen chloride, hydrogen cyanide, and oxides of nitrogen.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self-contained breathing apparatus with full protective clothing. Fight fire from upwind and keep all non-essential personnel out of area.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** If water is used to fight fire and cool the containers, contain run-off by diking to prevent contamination of water supplies. Containers in fire may burst or explode from excessive heat.

**6. ACCIDENTAL RELEASE MEASURES**

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:**

Control the spill at its source. Contain the spill to prevent it from spreading, contaminating soil, or entering sewage and drainage systems or any body of water. Clean up spills immediately. Cover entire spill with absorbent material such as sand, silica gel, acid binder, universal binder, or sawdust, scrape up and place into compatible disposal containers. Scrub the spill area with water and detergent. Pick up wash liquid with additional absorbent and place into disposal container. Once all material is cleaned up and placed in a disposal container, seal the container(s) and handle in an approved manner. Check local, state and federal regulations for proper disposal.

**CAUTION:** Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

**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. Then 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:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food and feed. Store in original container and out of reach of children, preferably in a locked storage area. 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, chemical-resistant gloves made of any waterproof material, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyvinyl chloride (PVC) or Viton®, and shoes plus socks. 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:** When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets with requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**RESPIRATORY PROTECTION:** Not normally required, if vapors or mists exceed acceptable levels, wear a NIOSH approved respirator.

**EYE PROTECTION:** Chemical splash goggles.

**SKIN PROTECTION:** Wear protective clothing: long-sleeved shirt and long pants, and shoes plus socks. Wear rubber or chemical-resistant gloves.

	<b>OSHA PEL 8 hr TWA</b>	<b>ACGIH TLV-TWA</b>
Glycerin (mist)	5 mg/m <sup>3</sup> (respirable fraction)	10 ppm

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE AND ODOR:** Off-white liquid with mild odor

**SPECIFIC GRAVITY (Water = 1):** 1.12 g/ml (20°C)

**VAPOR PRESSURE:** Not established

**PERCENT VOLATILE (by volume):** 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.

**BULK DENSITY:** 9.35 lbs./gal.

**BOILING POINT:** Not established

**EVAPORATION RATE:** Not established

**SOLUBILITY:** Disperses

**pH:** 7.5

**10. STABILITY AND REACTIVITY**

**STABILITY:** Stable under normal conditions.

**CONDITIONS TO AVOID:** Excessive heat and extreme cold.

**INCOMPATIBILITY:** None known.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of carbon, hydrogen chloride, hydrogen cyanide, and oxides of nitrogen.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**11. TOXICOLOGICAL INFORMATION**

**Acute Oral LD<sub>50</sub> (male rat):** >4,870 mg/kg

**Eye Irritation (rabbit):** Minimal irritant

**Inhalation LC<sub>50</sub> (rat):** >20 mg/L (1 hr).

**Carcinogenic Potential:** None listed in OSHA, NTP, ACGIH, or IARC

**Target Organs:** None noted

**Acute Dermal LD<sub>50</sub> (rat):** >2,000 mg/kg

**Skin Irritation (rabbit):** Not an irritant

**Skin Sensitization (guinea pig):** Not a sensitizer

**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.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply or allow it to drift onto blooming crops or weeds if bees are visiting the treatment area. This product is toxic to wildlife and highly toxic to aquatic invertebrates.

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

**13. DISPOSAL CONSIDERATIONS**

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.  
**CONTAINER DISPOSAL: Non-refillable 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](http://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. 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:** NOT REGULATED BY USDOT  
**U.S. Surface Freight Classification:** INSECTICIDES OR FUNGICIDES, INSECT OR ANIMAL REPELLENTS; NOI; OTHER THAN POISON (NMFC 102120; 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>	<b>NFPA</b>		<b>HMIS</b>	
	1 Health	0 Least	1 Health	
	1 Flammability	1 Slight	1 Flammability	
	1 Instability	2 Moderate	1 Reactivity	
		3 High	B PPE	
		4 Severe		
<b>SARA Hazard Notification/Reporting</b>				
<b>SARA Title III Hazard Category:</b>	Immediate <u>Y</u>	Fire <u>N</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:** New  
**PREPARED BY:** Registrations and Regulatory Affairs **REVIEWED BY:** Environmental Health and Safety  
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