



**SAFETY DATA SHEET (SDS)**  
**Fruit Tree & Vegetable Systemic Soil Drench**

Issue Date: May 26, 2015

**1. IDENTIFICATION**

Product name: **Fruit Tree & Vegetable Systemic Soil Drench**

Product type: Insecticide

EPA Registration No.: 53883-275-54705

Chemical name of active ingredient(s): Imidacloprid: 1-[(6-chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine

Manufacturer/Registrant: **Lawn and Garden Products, Inc.**  
 PO Box 35000  
 Fresno, CA 93745

For fire, spill, and/or leak emergencies, contact Chemtrec: Phone: 1-800-424-9300

Poison Control Center Phone: 1-800-222-1222

**2. HAZARDS IDENTIFICATIONS**

**CLASSIFICATION IN ACCORDANCE WITH OSHA HCS 29 CFR 1910.1200**

**Acute Toxicity:**

	Acute oral	Acute dermal	Acute inhalation	Eye irritation	Skin irritation	Skin Sensitization
<b>Category</b>	NC	NC	NC	NC	NC	NC

NC: Not classified.

**HAZARD STATEMENT:**

- Cause eye irritation

**PRECAUTIONARY STATEMENTS:**

- Wash hand thoroughly after handling. Do not eat, drink or smoke when using this product. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical advice or attention.

**STORAGE AND DISPOSAL:** See Section 7 and 13.

**OTHER HAZARDS:** See Section 11 and 12.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

COMMON NAME	CAS NO.	%	OSHA PEL	ACGIH TLV	OTHER	NTP/IARC/OSHA (Carcinogen)
Imidacloprid	13826-41-3	0.235	NE	NE	NA	NA

NE=Not established; NA=Not applicable.

#### 4. FIRST AID MEASURES

FIRST AID	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>IF IN EYES</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Pesticide Information Center at 1-800-858-7378 for emergency medical treatment information.	

#### 5. FIRE FIGHTING MEASURES

**FLASH POINT:** NA

**FLAMMABLE LIMITS:** NA

**EXTINGUISHING MEDIA:** Water spray, CO<sub>2</sub>, foam, dry chemical.

**UNUSUAL FIRE, EXPLOSION HAZARDS:** In the event of fire, irritating and toxic gasses can release due to thermal decomposition or combustion.

**FIRE-FIGHTING PROCEDURES:** Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Dike areas to prevent runoff and contamination of water sources. Equipment or materials involved in pesticide fires may become contaminated.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition or combustion may produce gases such as hydrogen chloride, hydrogen cyanide, and oxides of carbon and nitrogen.

#### 6. ACCIDENTAL RELEASE MEASURES

**ACTION TO TAKE FOR SPILLS/LEAKS:** Carefully handle the container to prevent spills. If material is spilled, carefully contain any material to prevent non-target contamination. Do not walk through spilled material and dispose of as directed in the product label.

Keep unprotected persons and animals out of the area. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces. Avoid dust formation. Avoid contact breathing dust. Avoid contact with skin and eyes. Use recommended protective equipment while carefully sweeping up spilled material. Place in covered container for reuse or disposal. Scrub contaminated area with soap and water. Rinse with water. Use dry absorbent material such as clay granules to absorb and collect wash solution for proper disposal. Contaminated soil may have to be removed and disposed. Do not allow material to enter streams, sewers, or other waterways.

#### 7. HANDLING AND STORAGE

**PRECAUTIONS TO BE TAKEN IN HANDLING:** Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment. Avoid breathing dust or vapor. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

**PRECAUTIONS TO BE TAKEN IN STORAGE:** Store upright at room temperature. Avoid exposure to extreme temperatures. Store in a locked area out of reach of children and domestic animals.

**STORAGE TEMPERATURE (MIN/MAX):** Normal and ambient temperatures.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

**HAND PROTECTION:** Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or Viton.

**EYE PROTECTION:** Wear protective eyewear (goggles, face shield, or safety glasses).

**SKIN PROTECTION:** Long-sleeved shirt and long pants. Shoes plus socks.

**RESPIRATOR REQUIREMENTS:** Not normally required. When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

### **ADDITIONAL PROTECTIVE MEASURES:**

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. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them.

### **USER SAFETY RECOMMENDATIONS:**

#### **Users Should:**

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing.

**EXPOSURE GUIDELINES:** Refer to Section 3.

**ENGINEERING CONTROLS:** To avoid exceeding exposure limits, handle only with adequate ventilation.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** Mostly clear and slightly opaque aqueous suspension liquid

**ODOR:** Very slight

**pH:** 7.1 – 7.5

**FLASH POINT:** NA

**DENSITY:** 0.986 – 1.01 @20°C

**VISCOSITY:** ~300 cps @20°C

**VAPOR PRESSURE:** Not available

**SOLUBILITY:** Not available

**PARTITION COEFFICIENT:** Not available

## 10. STABILITY AND REACTIVITY

**STABILITY:** Stable under normal conditions.

**CONDITIONS TO AVOID:** Not known

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition or combustion may produce gases such as hydrogen chloride, hydrogen cyanide, and oxides of carbon and nitrogen.

**HAZARDOUS POLYMERIZATION:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY/IRRITATION STUDIES:

Acute Oral LD<sub>50</sub> (Rat): > 4,143 mg/kg (female); 4870 mg/kg (male)  
Acute Dermal LD<sub>50</sub> (Rabbit): > 2,000 mg/kg (female and male)  
Acute Inhalation LC<sub>50</sub> (Rat): > 5.33 mg/L (4-h)  
Eye Irritation (Rabbit): Minimally irritating  
Skin Irritation (Rabbit): Non-irritating  
Dermal Sensitization: Not a skin sensitizer

**ROUTES OF EXPOSURE:** Eye and skin contact, inhalation and ingestion.

### IMMEDIATE EFFECTS:

Eye : Causes eye irritation  
Skin: May cause slight irritation. Harmful if absorbed through skin.  
Ingestion: Harmful if swallowed.  
Inhalation Harmful if inhaled.

### OTHER TOXICOLOGICAL INFORMATION:

<b>Chronic Toxicity</b>	In chronic dietary studies in rats and dogs exposed to imidacloprid, the target organs were the thyroids and/or liver at high dose levels.
<b>Assessment Carcinogenicity</b>	In oncogenicity studies in rats and mice, imidacloprid was not considered carcinogenic in either species.
<b>Reproductive &amp; Developmental Toxicity</b>	<p>REPRODUCTION: In a two-generation reproduction study in rats, imidacloprid was not a primary reproductive toxicant. Offspring exhibited reduced body weights at the high dose and in conjunction with maternal toxicity.</p> <p>DEVELOPMENTAL TOXICITY: In developmental toxicity studies in rats and rabbits, there was no evidence of an embryotoxic or teratogenic potential for imidacloprid. In both species, developmental effects were observed only at high doses and in conjunction with maternal toxicity.</p>
<b>Neurotoxicity</b>	Neurotoxicity studies in rats showed slight behavioral and activity changes only at the highest dose tested. There were no correlating morphological changes observed in the neural tissues.
<b>Mutagenicity</b>	The imidacloprid mutagenicity studies, taken collectively, demonstrate that the active ingredient is not genotoxic or mutagenic.

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL HAZARDS:** This pesticide is toxic to fish. Do not apply directly to water. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours, will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems. Do not contaminate water by cleaning of equipment or disposal of wastes.

This produce is highly toxic to bees exposed to direct treatment or residues on blooming crops, plants or weeds. Do not apply this product or allow it to drift to blooming crops, plants or weeds if bees are foraging in 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 groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

**ECOTOXICITY:** (Data based on Imidacloprid Technical)

LC<sub>50</sub> (96h) Rainbow Trout: 211 mg/L  
LD<sub>50</sub> Bobwhite Quail: 152 mg/kg  
EC<sub>50</sub> (48h) Daphnia magna: 85 mg/L  
EC<sub>50</sub> (72h) Algae: > 10 mg/L  
Bee LD<sub>50</sub>: 0.008 ug/bee

**ENVIRONMENTAL FATE:** (Data based on Imidacloprid Technical)

Hydrolysis half-life of Imidacloprid is greater than 30 days at pH 7 and 25°C. The aqueous photolysis half-life is less than 3 hours. The soil surface photolysis of Imidacloprid has a half-life of 39 days, and in soil, the half-life ranged from 26 to 229 days.

### 13. DISPOSAL CONSIDERATIONS

**PESTICIDE DISPOSAL:** Pesticide wastes are 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 of the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Dispose of product containers, waste containers, and residues according to label instructions and local, state, and federal health and environmental regulations.

### 14. TRANSPORT INFORMATION

**DOT CLASSIFICATION:**

Not regulated

### 15. REGULATORY INFORMATION

**FIFRA INFORMATION:**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information for safety data sheet, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

**CAUTION** Cause eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

**SARA TITLE III CLASSIFICATION:**

Section 302: Not applicable.  
Section 311/312: Acute health hazard (immediate)  
Chronic  
Section 313: Not applicable

**CERCLA RQ:** Not applicable

**RCRA CLASSIFICATION:** Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

**TSCA STATUS:** The ingredients of this product are listed on the TSCA inventory or are exempt.

**CA PROPOSITION 65:** Not applicable

**STATE RIGHT-TO-KNOW:** Imidacloprid (CAS No. 13826-41-3): NJ, PA

## 16. OTHER INFORMATION

HAZARD RATINGS	NFPA	
HEALTH:	1	0 MINIMAL
FLAMMABILITY:	1	1 SLIGHT
REACTIVITY:	1	2 MODERATE
		3 HIGH
		4 SEVERE

**SDS DATE:** Revised 5-21-2015. Changes made to all sections.

The information and recommendations contained herein are based upon data believed to be correct. However, no warranty of any kind, expressed or implied, is made with respect to the information contained herein.