



MATERIAL SAFETY DATA SHEET

BOUNTY™ Turf and Ornamental Insecticide

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Please read the entire document. This Material Safety Data Sheet contains important environmental, health and toxicology information for your employees, and anyone who will use, transport, store, dispose of or handle this product. Please make sure this information is given to them as required by Federal and State law. It also contains information to help meet community right to know/emergency response reporting requirements under SARA Title III and many other laws. If you resell this product, this MSDS must be given to the buyer or the information contained herein must be incorporated in your MSDS.

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BOUNTY™ Turf and Ornamental Insecticide
EPA REGISTRATION NUMBER(S): 1001-82
CHEMICAL NAME OF ACTIVE INGREDIENT (IUPAC): Imidacloprid 1-(6-chloro-3-pyridylmethyl)-N-nitroimidazolidin-2-ylideneamine
CAS/EU REGISTRY NUMBER OF ACTIVE INGREDIENT: 138261-41-3 (CAS); 582 (CIPAC)

COMPANY

Cleary Chemicals LLC
178 Ridge Road, Suite A
Dayton, New Jersey 08810

EMERGENCY TELEPHONE NUMBERS

CLEARY CHEMICALS LLC M-F 9-5 EST (800) 524-1662 OR (732) 329-8399	PROSAR: (800) 324-7598 CHEMTREC 24 HOUR: (800) 424-9300
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SECTION 2: COMPOSITION, INFORMATION ON INGREDIENTS

Component	CAS Number	Content (%) by wt.	ACGIH TLV	OSHA PEL
Imidacloprid	138261-41-3	21.4	NA	NA
Other Ingredients*	Proprietary	78.6		

*All ingredients may not be listed. Ingredients not listed do not meet the reporting requirements of the OSHA Hazard Communication Standard (HCS) as specified in 29 CFR 1910.1200.

SECTION 3: HAZARDS IDENTIFICATION

CAUTION. Harmful if swallowed or absorbed through skin. Avoid Contact with skin, eyes, or clothing.

SECTION 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 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 to 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 treatment advice.

Note To Physician: No specific antidote. Treat symptomatically.

For additional information on this pesticide product (including health concerns, medical emergencies, or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378 or Poison Control Center for assistance.

Effective Date: 10.23.08

NDA = No Data Available NA = Not Applicable

SECTION 5: FIRE FIGHTING MEASURES

Fire and Explosion Hazards: Negligible fire and explosion hazard. Not flammable.

Firefighting Media: Foam, carbon dioxide, dry chemical or water spray to extinguish fire.

Firefighting Precaution: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. Keep unnecessary people away. Dike area of fire to prevent material run-off. Decontaminate emergency personnel with soap and water before leaving the fire area. Avoid breathing dusts, vapors and fumes from burning materials. Control run-off water.

SECTION 6: ACCIDENTAL RELEASE MEASURES

In case materials are released, contact emergency response personnel. Keep unnecessary persons away. If emergency response personnel are unavailable, absorb small spills on spill pillows or other suitable absorbing material (e.g. sand, soil or diatomaceous earth) and place in a sealed container for disposal. Dike large spills and transfer to an appropriate container for disposal. Avoid contact of spilled materials and runoff with soil and surface waterways. Use suitable protective equipment (Section 8). Follow all fire prevention procedures (Section 5).

SECTION 7: HANDLING AND STORAGE

Handling Precautions: Do not get in eyes, on skin, or on clothing. Avoid breathing vapors or spray mist. Clean applicator and measuring equipment before using with other products and dispose of wash water where it will not contaminate crops, grazing, rivers and dams. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and wash thoroughly after handling.

Storage Precautions: Store in the original container and keep closed. Store in cool, dry and well-ventilated place. Keep out of reach of children. Keep away from food, drink and animal feeding stuffs.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls: Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Provide local exhaust or process enclosure ventilation system.

Eyes/Face: To protect against accidental eye contact, goggles/face-shield should be worn. **Skin Protection:** Rubber gloves should be worn. Wash thoroughly with soap and water after handling.

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Respiratory Protection: Ensure good ventilation. For maximum protection, wear a supplied air, full-face piece respirator, air lined hood, or full-face piece self-contained breathing apparatus.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Off-white viscous liquid
Odor:	No characteristic odor
Specific Gravity	1.108
Water Solubility	Disperse in water

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable under normal handling and storage conditions.

Incompatibilities: Avoid mixed with highly reactive chemicals such as strong acid, strong base or strong oxidizing agent.

Hazard Decomposition: Thermal decomposition products contain oxides of carbon, oxides of nitrogen, hydrochloride.

Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Oral Toxicity: LD50 for rats >2000 mg/kg

Acute Dermal Toxicity: LD50 for rats >2000 mg/kg

Acute Inhalation Toxicity: LC50 (4h) for rats > 5.50g/L

Skin Irritation: Non-irritating to skin of rabbits.

Eye Irritation: Slightly irritating to eyes of rabbits.

Skin Sensitization: Not considered as a potential sensitizer.

SECTION 12: ECOLOGICAL INFORMATION

This product may be toxic to birds and aquatic organisms. Avoid release to the environment in circumstances different to normal use. Referenced technical active ingredient ecological information list as below:

Birds: Acute oral LD50 for Japanese quail 31, bobwhite quail 152 mg/kg. Dietary LC50 (5 d) for bobwhite quail 2225, mallard duck >5000 mg/kg.

Fish: LC50 (96 h) for golden orfe 237 mg/L, rainbow trout 211 mg/L.

Bees: Harmful to honeybees by direct contact, but no problems expected when not sprayed into flowering crop or when used as a seed treatment.

Environmental Fate:

Animals: After oral administration of methylene-14C- and 4,5-imidazolidine-14C-labelled imidacloprid to rats, the radioactivity was quickly and almost completely absorbed from the gastro-intestinal tract and quickly eliminated (96% within 48 hours, mainly via the urine). Only 15% was eliminated as unchanged parent compound; the most important metabolic steps were hydroxylation at the imidazolidine ring, hydrolysis to 6-chloronicotinic acid, loss of the nitro group with formation of the guanidine and conjugation of the 6-chloronicotinic acid moiety. Imidacloprid is also quickly largely eliminated from hens and goats.

Plants Metabolism: was investigated on rice (after soil treatment), maize (seed treatment), potatoes (granule or spray application), aubergines (granules) and tomatoes (spray treatment). In all cases, imidacloprid is metabolized by loss of the nitro group, hydroxylation at the imidazolidine ring, hydrolysis to 6-chloronicotinic acid and formation of conjugates; all metabolites contained the 6-chloropyridinyl-methylene moiety.

Soil/Environment: In laboratory studies, the most important metabolic steps were oxidation at the imidazolidine ring, reduction or loss of the nitro group, hydrolysis to 6-chloronicotinic acid and mineralization; these processes were strongly accelerated by vegetation. Imidacloprid shows a medium adsorption to soil. Column leaching tests (with prior ageing) with a.i. and various formulations showed that imidacloprid and soil metabolites are to be classified as immobile; leaching into deeper soil layers is not to be expected if imidacloprid is used as recommended. Stable to hydrolysis under sterile conditions (under exclusion of light). Environmental DT50 4 h (calc., based on tests of direct photolysis in aqueous solutions). Besides sunlight, the microbial activity of a water/sediment system is an important factor for the degradation of imidacloprid.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal of product would be treated, stored, transported, and disposed of according to the local waste regulation authority. Do not flush to surface water or sanitary sewer system.

SECTION 14: TRANSPORT INFORMATION

USDOT: Not Regulated for Domestic Surface Transportation by 49CFR

NMF 100-U Classification: Insecticide or Fungicide, NOI, other than poison

IMO Classification:

Proper Shipping Name: PESTICIDE, LIQUID, TOXIC, N.O.S.
(Imidacloprid) Bounty Turf and Ornamental Insecticide 2 lb/gallon Flowable
Class: 6.1
UN Number: 2902
Packaging Group: III
Marine Pollutant:

IATA Classification:

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SECTION 15: REGULATORY INFORMATION

CERCLA Reportable Quantity (RQ): NA

SARA Title III – Sec 302 Extremely Hazardous Substances TPQ: NA

SARA Title III – Sec 304 Extremely Hazardous Substance RQ: NA

SARA Title III – Sec 313 Toxic Chemical Notification: Listed

RCRA Code: NA

NFPA Ratings: Health: 1 Flamability: 1 Reactivity: 1

CA Prop 65: This product does not contain any substances known to the State of California to cause Cancer or Reproductive harm.

SECTION 16: OTHER INFORMATION

Disclaimer: The information provided by Cleary Chemicals, LLC herein is given in good faith and to the best of our knowledge. However, no warranty is expressed or implied.

Reason for issue: New Product	Effective date: 10/23/2008
Prepared by: R. Fletcher	Replaces: