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GRUBS AWAY SAFETY DATA SHEET

1. IDENTIFICATION

Date of issue:April 2015Product Name:Grubs AwayRecommended Use:InsecticideRestrictions on Use:NoneEPA Registration No.:83100-14-829Company:Southern Agric

April 2015 Grubs Away Insecticide None 83100-14-829 Southern Agricultural Insecticides, Inc P.O. Box 218 Palmetto, FL 34220 (941) 722-3285 Chemtrec (800) 424-9300 (24 hour transportation spill response) 1-800-222-1222 (Poison Control Center)

2. HAZARD(S) IDENTIFICATION

Classification of the mixture: Classification by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122) Hazard class and category

Hazard Class	Category	Hazard Statement
Aquatic Toxicity Acute	2	H401
Aquatic Toxicity Chronic	2	H141

Adverse physicochemical, human health and environmental effects No additional information available

Label elements GHS Labeling Elements

Hazard pictograms



Signal word	(No signal word)
Hazard statements	H411 - Toxic to aquatic life with long lasting effects
Precautionary statements (prevention)	P273 - Avoid release to the environment
Precautionary statements (response)	P391 - Collect spillage
Precautionary statements (disposal)	P501 - Dispose of contents/container in accordance with federal, state and local regulations.

Other hazards/labeling information

Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS-No	Weight %
Imidacloprid	138261-41-3	10.5
Other Ingredients	NA	99.5

4. FIRST AID MEASURES

General information

IF INHALED: Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. 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 15-20 minutes. Call a poison control center or doctor for treatment advice if irritation develops or persists.

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 poison control center or doctor for treatment advice if irritation develops or persists.

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 by a poison control center or doctor. Do not give anything to an unconscious person

First-aid measures - general Have the product container or label with you when calling a poison control center or doctor, or going for treatment. See Label for Additional Precautions and Directions for Use. **Notes to Physician:** There is no specific antidote. Treat symptomatically

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: Negligible fire hazard. Cool fire-exposed containers with water. Unsuitable extinguishing media: High volume water jet. (Water contamination risk from runoff)

Special hazards arising from the substance or mixture

Fire hazard Hazardous decomposition products may be released during prolonged heating including smoke, carbon monoxide and dioxide, nitrogen oxides (NOx), and hydrogen chloride. Explosion hazard Reactivity The product is stable at normal handling and storage conditions. Firefighting instructions In the event of fire, wear self-contained breathing apparatus. Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Dike area to prevent runoff and contamination of water sources. Equipment or materials involved in pesticide fires may become contaminated.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

General Measures: Wear appropriate personal protective equipment

(PPE) : coveralls, gloves, boots. Avoid dust formation. Avoid breathing dust. Avoid contact with skin and eyes. Clean contaminated floors and objects thoroughly, observing environmental regulations. Prevent material from entering sewers, waterways, or low areas. Never return spills in original containers for re-use. Dispose of in accordance with local regulations.

For non-emergency personnel

Protective equipment : Wear appropriate personal protective equipment (PPE), coveralls, gloves, boots.

Emergency procedures: Avoid contact with spilled material. Do not allow product to enter streams, sewers or other water ways.

For emergency responders

Protective equipment Wear appropriate personal protective equipment (PPE), coveralls, gloves, boots.

Environmental Precautions

Highly toxic to aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.

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. Methods and material for containment and cleaning up

Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces Avoid dust formation. Avoid 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

Methods for cleaning up

Precautions for safe handling	Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing. Remove
	clothing/PPE immediately if material gets inside. Wash thoroughly and put on clean clothing
Storage conditions	Store in original container. Store in a cool, dry place. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Keep out of the reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equip	nent Train employees in safe use of the product. Follow all label instructions. Follow manufac turer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.		
Applicators and other hand	dlers must wear: Long sleeved shirt and long pants Chemical-resistant gloves,		
	(such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber,		
	natural rubber, polyethylene, polyvinylchloride (PVC) or viton), if greater		
	than or equal to 14 mils. Shoes plus socks.		
PPE required for early entry to treated areas that involves contact with anything that has been treated, such as plants,			
soil, or water, is: C	overalls. Chemical-resistant gloves, ((such as barrier laminate, butyl rubber, nitrile rubber,		
n	eoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton), all greater than		
O	regual to 14 mils. Shoes plus socks		

Exposure controls Ensure adequate ventilation, especially in confined areas.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties		Decomposition temperature
Physical state	Solid (granular)	Flammability (solid, gas)
Color	Tan and gray	Vapor pressure
Odor	None	Relative vapor density at 20°C
Odor threshold	Not applicable	Relative density
рН	4.10 at 25'C	Density
Relative evaporation rate	No data available	Solubility
(butylacetate= 1)		Log Pow
Melting point	Not applicable	Log Kow
Freezing point	Not applicable	Viscosity, kinematic
Boiling point	Not applicable	Viscosity, dynamic
Flash point	Not applicable	Explosive properties
Self ignition temperature	No data available	Oxidizing properties
5 1 1 1 1 1		Explosive limits

Other information No additional information available No data available Not flammable No data available No data available No data available 0.700g/cm³ at 20°C

No data available No data available Not applicable Not applicable Non explosive Non oxidizing No data available

Insoluble

10. STABILITY AND REACTIVITY

The product is stable at normal handling and storage conditions.
Stable under normal conditions.
No additional information available
Protect from heat.
Strong acids, strong bases and oxidizing agents.
Thermal decomposition products include: Carbon monoxide, carbon dioxide Nitrogen oxides (NOx) Hydrogen chloride (HCI)

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Grubs Away		
LD50 oral rat	> 4820 mg/kg	
LD50 dermal rat	> 2000 mg/kg	
LC50 inhalation rat (mg/l)	> 5.09 mg/l/4h	
Skin corrosion/irritation	Not irritating to skin	
Serious eye damage/irritation	Mildly irritating to eyes	
Respiratory or skin sensitisation	Not a sensitizer	
Imidacloprid (active ingredient)		
Sub-chronic toxicity	In a 3~week dermal toxicity study, rabbits treated with imidacloprid showed no local or systemic effects at levels up to and including 1000 mg/Kg, the limit dose. In a 4-week inhalation study, rats exposed to high concentrations of imidacloprid exhibited decreased body weight gains and changes in clinical chemistries and organ weights.	
Chronic toxicity	In chronic dietary studies in rats and dogs exposed to imidacloprid, the target organs were the thyroid and/or liver.	
Carcinogenicity	In oncongenicity studies in rats and mice, imidacloprid was not considered carcinogenic in either species.	
Reproductive & Developmental toxicity	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.	
	DEVELOPMENTAL TOXICITY: In developmental toxicity studies in rats and rabbits, there was no evidence of an embryonic or teratogenic potential for imidacloprid. In both species, developmental effects were observed only at high doses and in conjunction with maternal toxicity.	
Neurotoxicity	In acute and subchronic neurotoxicity screening studies in rats, imidacloprid produced slight neurobehavioral effects in each study at the highest dose tested. There were no correlating morphological changes observed in the neural tissues.	
Mutagenicity	The imidacloprid mutagenicity studies, taken collectively, demonstrate that the active ingredient is not genotoxic or mutagenic.	

12. ECOLOGICAL INFORMATION

Ecotoxicity - Imidacloprid (Acute)

Bees LC50/EC50 (48 hour):	0.078 ug/bee (contact)
Invertebrates (Daphnia) LC50/EC50 (48 hour):	85mg/L
Invertebrates (Mysid) LC50/EC50 (96 hour):	0.038 ppm
Fish (trout) LC50/EC50 (96 hour):	211 mg/L
Birds (Bobwhite Quail LC50/EC50):	152 mg/kg
Birds (Japanese Quail) LC50/EC50):	31 mg/kg

Ecotoxicological Summary

Highly toxic to aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.

Ecological Information

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 ground water contamination.

Persistence and degradability

Hydrolysis half-life of imidacloprid is greater than 30 days at pH 7 and 25 degree 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 26-229 days.

Bioaccumulative potential Imidacioprid Log Kow 0.57 (pH7, 25° C)

Mobility in soil

The chemical is moderately soluble, and has moderate binding affinity to organic materials in soils. However, there is a potential for the compound to move through sensitive soil types including porous, gravelly, or cobbly soils, depending on irrigation practices

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste disposal
 Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide is a violation of Federal law.
 Do not reuse or refill this container. Do not use container in connection with food, feed, or drinking water. Dispose of empty container in a sanitary landfill, or by incineration, or if allowed by state and local authorities by burning. If burned, stay out of smoke. If the container is leaking or material is spilled for any reason or cause, carefully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Dispose of as directed for pesticides above, or apply uncontaminated product according to the Directions for Use. Keep unauthorized people away. Consult label for additional container disposal information.

14. TRANSPORT INFORMATION

Not Regulated by US DOT or Canadian TOG for ground shipment

Ground transport Not Regulated by US DOT Not Regulated by Canadian TOG

Transport by sea (IMOG) UN 3077; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Imidacloprid); 9; III; Marine Pollutant

Air transport (IATA) UN 3077; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Imidacloprid); 9; III

Additional Air. Sea and International Transportation Information UN-No. 3077 Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Imidacloprid)

Transport document description UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Class (UN) Hazard labels (UN)





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 required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

Signal word	CAUTION
Hazard statements	Harmful if swallowed or absorbed through skin.
Precautionary statements	Avoid contact with skin, eyes, or clothing. Wash thoroughly after handling. Keep children and pets off treated area until dry.

SARA 313 Regulated Chemical(s):	None	
Title III hazard classification:		
Acute Health Hazard:	Yes	
Chronic Health Hazard:	No	
Fire:	No	
Reactivity/Physical hazard:	No	
Pressure:	No	

Canadian Regulatory Information:

This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all the information required by the CPR. WHMIS Classification: D2B - Toxic

16. OTHER INFORMATION			
NFPA:	Health: 1	Flammability: 0	Reactivity: 0
HMIS:	Health: 1	Flammability: 0	Physical Hazard: 0; PPE: E

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their on investigations to determine the suitability of the information for their particular purposes. In no event shall Southern Agricultural Insecticides, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Southern Agricultural Insecticides, Inc has been advised of the possibility of such damages.