S A SOUTHERN 5 D AG®

GRUBS AWAY SAFETY DATA SHEET

1. IDENTIFICATION

Date of issue:April 2015Product Name:Grubs AwayRecommended Use:InsecticideRestrictions on Use:None

EPA Registration No.: 83100-14-829

Company: 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 ClassCategoryHazard StatementAquatic Toxicity Acute2H401Aquatic Toxicity Chronic2H141

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 P273 - Avoid release to the environment

(prevention)

Precautionary statements

(response)

P391 - Collect spillage

Precautionary statements P501 - Dispose of contents/container in accordance with federal,

(disposal) 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 Product is not explosive.

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

Methods for 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

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 equipment 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 handlers 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: Coveralls. Chemical-resistant gloves, ((such as barrier laminate, butyl rubber, nitrile rubber,

neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton), all greater than

or equal to 14 mils. Shoes plus socks

Exposure controls Ensure adequate ventilation, especially in confined areas.

Not applicable

No data available

9. PHYSICAL AND CHEMICAL PROPERTIES

Decomposition temperature No data available Information on basic physical and chemical properties Flammability (solid, gas) Not flammable Physical state Solid (granular) Vapor pressure No data available Color Tan and gray Relative vapor density at 20°C No data available Odor None Relative density No data available Odor threshold Not applicable 0.700g/cm3 at 200 C Density 4.10 at 25'C pΗ Solubility Insoluble Relative evaporation rate No data available Log Pow No data available (butylacetate= 1) Log Kow No data available Melting point Not applicable Viscosity, kinematic Not applicable Freezing point Not applicable Viscosity, dynamic Not applicable Boiling point Not applicable

Explosive properties

Oxidizing properties

Explosive limits

Other information

Self ignition temperature

Flash point

No additional information available

Non explosive

Non oxidizing

No data available

10. STABILITY AND REACTIVITY

Reactivity The product is stable at normal handling and storage conditions.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions No additional information available

Conditions to avoid Protect from heat.

Incompatible materials Strong acids, strong bases and oxidizing agents.

Hazardous decomposition products

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. In chronic dictary studies in rate and dogs exposed to imidacloprid the target organs.

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

Chronic 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.

Container disposal 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.

(Imidacloprid), 9, III

Class (UN) Hazard labels (UN)



9

Packing group (UN) III
Marine Pollutant (Y/N) Y
Dangerous for the environment



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.