

Material Safety Data Sheet

TURFTHOR 2.5G

Emergency Phone 1-800-424-9300 (Chemtrec)

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: TURFTHOR 2.5G

CHEMICAL NAME: Imidacloprid

CHEMICAL FAMILY: Neo-nicotinoid

COMPANY: Ensysstex IV, Inc.

ADDRESS: 2713 Breezewood Ave., Fayetteville, NC 28303

DAYTIME PHONE: 1-866-367-8467 (1-866-FOR-THOR)

2. COMPOSITION / INFORMATION ON INGREDIENTS

Imidacloprid 2.5% CAS# 138261-41-3

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes and clothing. Wash thoroughly with soap and water after handling.

POTENTIAL HEALTH EFFECTS:

Eye: Causes eye irritation. Do not get in eyes.

Skin: Harmful if absorbed through skin. Avoid contact with skin and clothing.

Ingestion: Harmful if swallowed. Do not take internally.

4. FIRST AID MEASURES

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-369-4352 for emergency medical treatment information.

INHALATION: 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 further treatment advice..

EYE CONTACT: 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.

SKIN CONTACT: 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.

INGESTION: Call 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 the poison control center or doctor. Do not give anything to an unconscious person.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Any extinguishing media may be used on nearby fires.

FIRE FIGHTING INSTRUCTIONS: In the event of fire, wear self-contained breathing apparatus. Keep out of smoke. Fight fire from an 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

GENERAL: Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces. Store in such a manner as to prevent cross contamination with other pesticides, fertilizers, food and feed.

SPILL: Vacuum, shovel or sweep up granules and place in container for disposal in accordance with applicable local regulations. Use recommended protective equipment while carefully sweeping up spilled material. Avoid contamination of water bodies during cleanup and disposal. Do not allow material to enter streams, sewers, or other waterways.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: No special handling precautions are required, but dry indoor storage is recommended. Good housekeeping procedures should be followed to minimize dust generation and accumulation.

STORAGE CONDITIONS: Do not contaminate water, food, or feed by storage or disposal. Store in a cool, dry place in a low moisture environment, preferably in a locked storage area. Store in an area where the average temperature does not exceed 100°F.

WORK / HYGENIC PROCEDURES: 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 Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. As soon as practical, wash thoroughly and change into clean clothing.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EYE / FACE PROTECTION: Wear tightly fitting safety goggles.

HAND PROTECTION: Wear suitable chemical resistant gloves.

BODY PROTECTION: Wear long-sleeved shirt and long pants and shoes plus socks.

RESPIRATORY PROTECTION: 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.

Otherwise, refer to label for actual regulatory personal protection requirements.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Grey solid granules

BULK DENSITY: 55-60 lbs / cubic foot

10. STABILITY AND REACTIVITY

Stable product under normal conditions. Hazardous decomposition products include hydrogen chloride (HCl), hydrogen cyanide (hydrocyanic acid), carbon dioxide (CO₂) and nitrogen oxides (NO_x).

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL TOXICITY: Male/female rat: LD50: > 4,820 mg/kg

ACUTE DERMAL TOXICITY: Male/female rabbit: LD50: > 2,000 mg/kg

ACUTE INHALATION TOXICITY: Male/female rat: LC50: > 5.09 mg/l Exposure time = 4 hours.

SKIN IRRITATION: Rabbit: non-irritant

EYE IRRITATION: Rabbit: Mild eye irritation

SENSITIZATION: Guinea pig: Non-sensitizing

The non-acute information below pertains to the technical-grade active ingredient.

SUBCHRONIC 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 thyroids and/or liver.

REPRODUCTIVE TOXICITY: 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 embryotoxic 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. In a one-generation developmental neurotoxicity screening study in rats, offspring exposed to imidacloprid showed decreased motor activities. These effects occurred at the highest dose tested and in conjunction with maternal toxicity. 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

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.

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.

13. DISPOSAL CONSIDERATIONS

GENERAL DISPOSAL GUIDANCE: 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: Completely empty container into application equipment, then dispose of empty container in a sanitary landfill, by incineration or by other procedures approved by state/provincial and local authorities. If burned, stay out of smoke.

14. TRANSPORT INFORMATION

Not regulated by the U.S. Department of Transportation.

15. REGULATORY INFORMATION

UNITED STATES

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT): None.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): None.

SAFE DRINKING WATER ACT (SDWA): None.

SECTION 16. OTHER INFORMATION

NFPA Health -1 Flammability -1 Reactivity -1 Others -none

0=minimal hazard, 1=slight hazard, 2=moderate hazard, 3=severe hazard, 4=extreme hazard

Revised 08/08