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Material Safety Data Sheet (MSDS)

MSDS# AT-HER01400

Date: 05/20/2008

Section 1 - Product Chemical and Company Identification

| | | |
|-----------------|------------------------------|----------------|
| Product name | Technical Metsulfuron-Methyl | |
| Product Use | Herbicide | |
| Company | AmTide, LLC. | |
| EPA Reg. No | 83851-2 | |
| Emergency phone | Chemtrec | 1-800-424-9300 |
| | AmTide, LLC. | 1-949-735-4723 |

Section 2 - Composition /Information on Ingredients

| Active Ingredient | CAS number | w/w % |
|--------------------|------------|-------|
| Metsulfuron Methyl | 74223-64-6 | ≥98.0 |
| Other ingredients | | ≤2.0 |

Section 3 - Hazards Identification

Emergency Overview:

CAUTION!

Causes eye irritation. Harmful if absorbed by skin. Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist.

Potential Health Effects:

Swallowed: Product is expected to have low toxicity if swallowed.

Eye: Causes moderate eye irritation.

Skin: Avoid contact with skin.

Inhaled: Product is expected to have low inhalation hazard.

Section 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 1-949-679-3535 for emergency medical treatment information.

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 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 a poison control center or doctor for treatment advice.

If inhaled: Move person to fresh air; If person is not breathing, call an ambulance, then give



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artificial respiration, preferably by mouth-to-mouth, if possible; Call a poison control center or doctor for further treatment advice.

If swallowed: call poison 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 or doctor; Do not give anything by mouth to an unconscious person.

Note to physician: There is no specific antidote. All treatment should be based on observe signs and symptoms of distress in the patient. Overexposure to material other than this product may have occurred.

Section 5 - Fire Fighting Measures

Extinguishing Media: Water fog, fine water spray, foam, dry agent or carbon dioxide.

Special Fire Fighting Procedures: Fire fighters should wear full protective gear, including self-contained breathing apparatus. Toxic decomposition products may be produced in a fire. Keep unnecessary people away. Use water spray to cool fire-exposed containers. Bund area to prevent contamination of water sources. Dispose of fire control water and spillage later.

Reactivity Hazards: Stable under normal conditions.

Section 6 - Accidental Release Measures

Avoid contact with the spilled material or contaminated surfaces. When dealing with spills wear suitable personal protective clothing and equipment. Sweep up spilled material, collect and store in properly labeled, sealed drums for safe disposal. Avoid creating dust. If spray mixture is spilled, absorb it in suitable inert absorbent material and collect in drums as above. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

Section 7 - Handling and Storage

Good industrial practice in housekeeping and personal hygiene should be followed.

Handling

Avoid contact with eyes or clothing. 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. Do not apply directly to water, to areas where surface water is present or to inertial areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water.

Storage

Store product in original container only. Keep container tightly closed. Store in cool, dry place. Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

Section 8 - Exposure Controls/Personal Protection

Engineering Controls:

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the



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requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40CFR 170.240 (d) (4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

Personal Protective Equipment for applicator and other handlers:

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes and stocks

Follow manufacture instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

General safety and hygiene measures:

Wash soiled clothing immediately.

Section 9 - Physical and Chemical Properties

Appearance: Off-white or off-white to very pale yellow powder

Density: 1.46g/mL

Melting point: 159.3~164.3□

PH Value: 3.85

Solubility: 0.0006g/100mL in hexane, 1.1391g/100mL in methanol and 0.0263g/100mL in 1-octanol.

Flammability: Non combustible material.

Explosibility: Not have explosive characteristics.

These physical data are typical values based on material test but may vary from sample to sample.

Typical values should not construed as a guaranteed analysis and any specific lot or as specification items.

Section 10 - Stability and Reactivity

Stability: Stable under normal conditions. Hydrolysis at pH <7.

Incompatibility: Non Known.

Polymerization: Will not occur.

Conditions to avoid: Keep away from strong oxidizing agents.

Section 11 - Toxicological Information (Based on the active Ingredient)

Acute oral toxicity: LD50□ 5000 mg/kg to female rats.

Acute dermal toxicity: LD50□ 5050mg/kg to rabbits.

Acute inhalation toxicity: LC50□ 2.35mg/L to rats

Acute dermal irritation: Not skin irritation. Toxicity category □.

Acute eye irritation: Minimally irritation of the eyes. Toxicity category □.

Skin sensitization: None skin sensitizing reaction in guinea pig.

Chronic effects: Based on available data, repeated exposures are no anticipated to cause additional significant adverse effects.



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Section 12 - Ecological Information (Based on the active ingredient)

Aquatic toxicity:

Fish LC50 (96 h) for rainbow trout 413.7 mg/l, and the NOEC for survival is 180 mg/L

Daphnia EC50 (48 h) is about 13.74 mg/L.

Environmental hazards

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Section 13 - Disposal Considerations

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste facility.

Container Disposal: Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into manufacturing equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

Section 14 - Transport Information

DOT: Not Regulated by 49 CFR (DOT)

IMO/IMDG: Not Regulated by IMO/IMDG

IATA: Not Regulated by IATA

ADDITIONAL INFORMATION: Although material is not regulated by the DOT/IMO/IATA, it may be transported as a class 9 (UN 3077) under special provision SP1146 (DOT), 909 (IMDG) or A97 (IATA). The following description would apply using any one of the aforementioned special provisions:

N.O.S. Hazard class: 9 (Environmentally hazardous substances, solid)

Packing Group:

UN number: 3077

Section 15 - Regulatory Information

U.S. Federal Regulations

Title Hazard Classifications Sections 311,312:

Acute: Yes

Chronic: No

Fire: No

Reactivity: No



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Pressure: No

In the United State this product us regulated by the US Environmental Protection Agency under the Federal Insecticide, Fungicide and Rodenticide Act. It is a violation of federal law to use this product in a manner inconsistent with its labeling.

Section 16 - Other Information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. AmTide, LLC assumes no responsibility for results obtained or for incidental or consequential damages arising from the use of these data.