MATERIAL SAFETY DATA SHEET

Section 1. Company Contact and Chemical Product Information

Product Name: PLOTTER® Agricultural Herbicide
EPA Reg. No.: 83100-3-83979
Product Code: RTFH-004
Corporate Contact: 1-866-927-6826
Emergency number for spills and cleanup: CHEMTREC: 1-800-424-9300
Chemical Name of Active Ingredient (IUPAC): Methyl: 2-(4-methoxy-6-methyl-1,3,5-triazin-2-ylcarbamoylsulfamoyl)benzoate
Chemical Formula of Active Ingredient: C_{14}H_{15}N_{5}O_{6}S
CAS/EU Registry Number of Active Ingredient: 74223-64-6 (CAS); 441 (CIPAC)

Section 2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>Content (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metsulfuron-methyl</td>
<td>74223-64-6</td>
<td>60</td>
</tr>
<tr>
<td>Inert ingredients</td>
<td>Proprietary</td>
<td>40</td>
</tr>
</tbody>
</table>

Section 3. Hazards Identification

CAUTION: Causes eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing dust or spray mist.

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 a 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 15-20 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 15-20 minutes. Call a poison control center or doctor for treatment advice.

If Inhaled: Move person 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.

Note to Physician (Sulfonylurea) Symptoms of Poisoning and Recommendations for Medical Treatment: The compound does not cause any definite symptoms that would be diagnostic. Contact with the eyes may cause irritation. No specific antidote. Treat symptomatically.
For 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 a poison control center for assistance.

Section 5. Fire Fighting Measures
Fire and Explosion Hazard: Negligible fire and explosion hazard.

Firefighting Media: 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 facepiece operated in the pressure demand or other positive pressure mode. Keep unnecessary people away. Use as little water as possible. 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, use suitable protective equipment (Section 8) and follow all fire prevention procedures (Section 5). Keep unnecessary persons away. Isolate hazard area and deny entry. Move containers away from spill to a safe area. Shovel or sweep dry material or absorb spills with suitable absorbing material and place in a sealed container for disposal. Prevent liquid from entering sewers, waterways or low areas.

Section 7. Handling and Storage
Handling Precautions: Avoid getting in eyes or on skin, or clothing and breathing dust. Remove contaminated clothing immediately. Wash thoroughly after handling.

Storage Precautions: Store in a cool, dry area. Keep out of reach of children. Do not contaminate water, food, or feed by storage or disposal. Keep from contact with fertilizers, insecticides, fungicides, and seeds during storage.

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.

Eye/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.

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

Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Off-white granule</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>Approx. 0.65 g/ml</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Disperse in water</td>
</tr>
</tbody>
</table>
Section 10. Stability and Reactivity
Stability: Stable under the normal handling and storage conditions.

Incompatibilities: Avoid mixed with strong acids and alkalis.

Hazard Decomposition: Thermal decomposition may emit toxic fumes of CO₂, NO₂ and organic sulfides.

Hazard Polymerization: Will not occur.

Section 11. Toxicological Information
Acute Oral Toxicity: LD₅₀ for rats >5000 mg/kg
Acute Dermal Toxicity: LD₅₀ for rabbits >5050 mg/kg
Acute Inhalation Toxicity: LC₅₀ (4 h) for rats 2.27 mg/l
Skin Irritation: Slightly irritating to skin of rabbits.
Eye Irritation: Severely irritating and assigned to Toxicity Category IV.

Section 12. Ecological Information
This product has very low toxicity to aquatic organism and wild animals. Referenced technical active ingredient ecological information list as below:

Birds
LD₅₀ for mallard ducks >2510 mg/kg. Eight-day dietary LC₅₀ for mallard ducks and bobwhite quail>5620 mg/kg diet.

Fish
LC₅₀ (96 h) for bluegill, sunfish and rainbow trout >150 mg/l.

Bee
Non-toxic to bees; LD₅₀ >25 mg/bee

Environmental Fate:
Animals
In mammals, following oral administration, metsulfuron-methyl is excreted predominantly unchanged. The methoxycarbonyl and sulfonyleurea groups are only partly degraded, by O-demethylation and hydroxylation.

Plants
In plants, undergoes complete degradation within a few days, by hydrolysis and conjugation. In addition to the hydroxymethyl analogue, other metabolites identified include methyl 2-(aminosulfonyl) benzoate and 2-(aminosulfonyl) benzoic acid. Rapidly metabolized within cereal plants.

Soil/Environment:
In soil, metsulfuron-methyl is broken down both by chemical hydrolysis and by microbial degradation. DT₅₀ varies from 1 to 5 weeks, with breakdown being more rapid at lower soil pH, at higher temperatures, and at higher levels of soil moisture. Kₒc 35 (pH 7).

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

US DOT Classification: Not regulated by 49 CFR (DOT)

IMO/IMDG Classification: Not Regulated by IMO/IMDG

IATA Classification: 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 SP146 (DOT), 909 (IMDG) A97 (IATA). The following description would apply using any one of the aforementioned special provisions: UN 3077, Environmentally hazardous substances, solid, N.O.S., (Metsulfuron-methyl), 9, PG III.

Section 15. Regulatory Information

USEPA Registered Company Address:
Rotam North America, Inc., 660 Newtown-Yardley Road, Newtown, PA 18940

Product Signal Word: CAUTION

European/International Regulation:

Hazard Symbols:
   N  Dangerous to environment.

Risk Phrases:
   R 22  Harmful if swallowed.

Safety Phrases:
   S 1/2  Keep locked up and out of reach of children.
   S 3   Keep in a cool place.
   S 24/25  Avoid contact with skin and eye.

Section 16. Other Information

Disclaimer: The information provided by Rotam North America, Inc. contained herein is given in good faith and to the best of our knowledge. However, no warranty is expressed or implied.