Bensulfuron methyl -MATERIAL SAFETY DATA SHEET

Manufacturer/information service:
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1. Chemical Product Identification
   Product Name: Bensulfuron methyl
   Molecular Formula: C_{16}H_{18}O_{7}N_{4}S
   Molecular Weight: 410.4
   Structural Formula:
   ![Structural Formula]
   Chemical Name: methyl 2-[[[(4,6-dimethoxypyrimidin-2-yl)amino]carbonyl] amino] sulfonyl[methyl]benzoate
   Form: Solid
   Color: white or slight yellow
   Odor: odorless
   CAS No.: 83055-99-6

2. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Composition</th>
<th>CAS No.</th>
<th>Content %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bensulfuron methyl</td>
<td>83055-99-6</td>
<td>95.0</td>
</tr>
<tr>
<td>Other ingredients</td>
<td></td>
<td>5.0</td>
</tr>
</tbody>
</table>

3. Hazards Identification
Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if swallowed.
Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing.

4. First Aid Measures
Eye: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Seek Medical attention if necessary.
Skin: In case of contact, immediately wash skin with soap and plenty of water. Wash contaminated clothing before re-use.
Inhaled: No specific intervention is indicated, as the compound is not likely to be hazardous by inhalation. However, seek Medical attention if necessary.
Swallowed: If swallowed seek medical attention.

5. Fire-Fighting Measures
Not a fire and explosion hazard. Like most organic powders, or crystals, under severe dusting conditions, this material may form explosive mixtures in air. Evacuate personnel to a safe area. Wear self-contained breathing apparatus and full protective equipment.
Suitable extinguishing media: water spray, dry powder, foam, carbon dioxide (CO2). On small fires, if area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the contamination hazard.

6. Accidental Release Measures
Safeguards (Personnel)
NOTE: Review Fire Fighting measures and handing sections before proceeding with clean-up. Use appropriate Personal protective Equipment during clean-up.
Spill: Prevent material from entering sewers, waterways, or low areas.
Spill Clean Up

7. Handling and Storage
Handling (Personnel): 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.
Storage: Do not contaminate water, food or feed by storage. Store product in original container only. Store in a cool, dry place

8. Exposure Controls/Personal Protection
Engineering Controls:
Use only with adequate ventilation.

Personal Protection:

Product will irritate the eyes. Do not inhale dust. When preparing spray and using the prepared spray wear goggles. If product in eyes wash it out immediately with water. Wash hands, face and skin thoroughly with soap and water after use and before eating, drinking or smoking. After each day’s use wash goggles.

9. Physical and Chemical Properties

Bulk density: 570 - 670 kg/m³

Chemical Family: Sulfonylurea

pH: 6.0 – 6.5 at 20°C (at 10 g/L H₂O)

Melting Point/Range: 185 – 188 °C

Autoignition Temperature: 400 °C

Solubility (water): dispersible

Partition Coefficient (n-octanol/water): 1.56 (pH 5), 6.15 (pH 7)

10. Stability and Reactivity

Stable at normal temperatures and storage conditions. No incompatibilities reasonably foreseeable. Decomposition will not occur.

Polymerization: will not occur.

11. Toxicological Information

Acute oral LD₅₀ (rat - male): > 5000 mg/kg

Acute oral LD₅₀ (rat - female): > 4900 mg/kg

Acute dermal LD₅₀ (rabbit): > 2000 mg/kg

Acute 4 hr inhalation LC₅₀ (rat): > 7.5 mg/L (bensulfuron methyl)

12. Ecological and Ecotoxicological Information

96 hr LC₅₀ (rainbow trout and bluegill sunfish): > 450 mg/L

48 hr LC₅₀ (Daphnia): > 150 mg/L

8 day LC₅₀ (bobwhite quail and mallard duck): > 5620 mg/kg (bensulfuron methyl)

72 hr EC₅₀ (algae): 2.0 mg/L

Bioaccumulation: log POW = 0.78 (pH 7) (bensulfuron methyl)
13. Disposal Considerations

Waste Disposal: Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Do not flush to surface water or sanitary sewer system. Do not contaminate water, food, or feed by disposal. Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, if allowed by state and local authorities, by burning.

14. Transport Information
Not applicable.

15. Regulatory Information
Not applicable.

16. Other Information
All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produce formulations containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.