



Safety Data Sheet

Report Date 19-May-16

Page 1 of 5

1. Identification

Product Name : OMNI BRAND MSM 60 DF HERBICIDE
Synonyms : None
Product Use : Metsulfuron methyl herbicide
Manufacturer/Supplier : Helena Chemical Company
Address : 225 Schilling Blvd. Collierville, TN 38017
General Information : 901-761-0050
Transportation Emergency Number : CHEMTREC:800-424-9300

2. Hazard Identification



Signal Word : Warning
Skin Irritation : Not classified as hazardous under 29 CFR 1910.1200 (2012)
Eye Irritation : Causes eye irritation
Acute Toxicity Oral : LD50 >5,000 mg/kg (female rat)
Acute Toxicity Dermal : LD50 >2,000 mg/kg (rabbits)

Hazard Categories : Inhalation Toxicity-4; Eye Irritation-2B; Acute Aquatic Toxicity-1; Chronic Aquatic Toxicity-1

Hazard Statement : Causes eye irritation
Harmful if inhaled
Very toxic to aquatic life
Very toxic to aquatic life with long lasting effects

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Metsulfuron-methyl: Methyl 2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]amino]sulfonyl]benzoate	74223-64-6	60.0
Ammonium Sulfate	7783-20-2	<=16.6
Other ingredients	Proprietary	23.4

4. First Aid Measures

Eye : 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. Get medical advice or attention.

Skin : 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.

Inhalation : Remove person to fresh air and keep comfortable for breathing. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor if you feel unwell.



Safety Data Sheet

Report Date 19-May-16

Page 2 of 5

- Ingestion** : 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 if unconscious.
- Indication of Immediate Medical Attention and Special Treatment Needed** : There is no specific antidote. Treat symptomatically.

5. Fire Fighting Measures

- Extinguishing Media** : Use water spray, foam, dry chemical or carbon dioxide extinguishing agents.
- Specific Hazards Arising from the Chemical** : Like most organic powders or crystals, under severe dusting conditions, this material may form explosive mixtures in air.
- Special Fire Fight Proc** : Wear self-contained breathing apparatus and full protective clothing.

6. Accidental Release Measures

- Personal Precautions** : Isolate hazard area. Keep unnecessary and unprotected personnel from entering.
- Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.
- Emergency Procedures** : Keep material out of lakes, streams, ponds and sewer drains. Clean up spills immediately.
- Methods and Materials for Containment and Cleanup** : Use a wet sweeping compound or light spray of water to prevent dust formation. Sweep up and shovel into suitable containers for disposal. Clean and neutralize spill area, tools and equipment by washing with bleach water and soap. Absorb wash water and add to the collected waste. Waste must be classified and labeled prior to recycling or disposal.

7. Handling and Storage

- Precautions for Safe Handling** : Use only outdoors or in a well-ventilated area. Avoid release to the environment. Keep away from heat, sparks and flames. Avoid breathing dust. Avoid contact with eyes, skin or clothing. Wash hands thoroughly after handling. Wash clothing after use. Wash hands after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
- Conditions for Safe Storage** : Store in original container only. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in a cool, dry place. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

8. Exposure Controls / Personal Protection

- TLV/PEL** : No TLV/PEL for ingredients in this mixture.
- Appropriate Engineering Controls** : Use only with adequate ventilation.
- Personal Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.

9. Physical and Chemical Properties



Safety Data Sheet

Report Date 19-May-16

Page 3 of 5

Odor/Appearance : Beige granular solid; no discernible odor.
Flash Point, °F : Not a fire or explosion hazard
Boiling Point, °F : Not applicable
Melting Point(Freezing point), °C : Not applicable
Vapor Pressure, mm Hg @ 20 °C : 3.3x10(-7) mPa (25 Deg C)(MSM)
Vapor Density : No data available
Solubility in Water : Dispersible
Molecular Formula : Not applicable, formulated mixture.
Density, g/mL @ 25 °C : 0.545 g/cm3 (ambient temp)
Evaporation Rate(Butyl Acetate = 1) : No data available
Octanol/Water Partition Coefficient : Kow Log P =0.0018 (MSM)
pH : 5.47 (1%)
Flammable Limits (approximate volume % in air) : No information found
Auto-ignition Temperature : No information found
Decomposition temperature : No data available

10. Stability and Reactivity

Reactivity : Not reactive
Chemical Stability : Stable
Hazardous Decomposition Products : Oxides of carbon, nitrogen and sulfur.
Hazardous Polymerization : Will not occur
Conditions to Avoid : Heat, moisture and light.
Incompatible Materials : Keep away from strong oxidizing agents.

11. Toxicological Information

Acute Toxicity (Oral LD50) : >5,000 mg/kg (female rat). Not classified as hazardous under 29 CFR 1910.1200 (2012).
Acute Toxicity (Dermal LD50) : >2,000 mg/kg (rabbits). Not classified as hazardous under 29 CFR 1910.1200 (2012).
Acute Toxicity Inhalation LC50 : >2.05 mg/L/4 hour. Harmful if inhaled.
Likely Routes of Exposure : Eye, inhalation
Skin Irritation : Not classified as hazardous under 29 CFR 1910.1200 (2012).
Eye Irritation : Causes eye irritation.
Skin Sensitization : No skin sensitizing reaction (guinea pig).
Carcinogenic : Not carcinogenic (rat). Not listed by ACGIH, NTP, IARC or OSHA.
Chronic Effects : Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.
Other Hazards : No teratogenic potential. Animal tests with metsulfuron-methyl have not demonstrated developmental effects. No evidence of neurotoxicity.

12. Ecological Information

Ecotoxicity : Acute Aquatic Toxicity: Very toxic to aquatic life. Chronic Aquatic Toxicity: Very toxic to aquatic life with long lasting effects.
Persistence and Degradability : Metsulfuron-methyl will degrade faster under acidic conditions and in soils with higher moisture content and higher temperature.
Bioaccumulative Potential : No potential.



Safety Data Sheet

Report Date 19-May-16

Page 4 of 5

Mobility in Soil : Metsulfuron-methyl is relatively mobile in most soils but will be retained longer in soils with higher percentages of organic matter. More mobile in alkaline soils than in acidic soils.

Other Adverse Effects : Avoid contamination of any water supply with chemical or empty container.

13. Disposal Considerations

Waste Disposal Method : This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.

14. Transport Information

UN Proper Shipping Name : Not regulated for ground (DOT) shipments. Regulated if shipped by air (IATA) or water (IMDG).

Transport Hazard Class : None

UN Identification Number : None

Packaging Group : None

Environmental Hazards : Not listed as a marine pollutant per Appendix B to 49 CFR 172.101. If shipped by air (IATA) or water (IMDG), ship as Marine Pollutant.

Transport in Bulk : Not regulated for ground (DOT) shipments.

Special Precautions for Transportation : If shipped by air (IATA) or water (IMDG), ship as: UN3077, Environmentally Hazardous Substance, Solid, n.o.s., (Metsulfuron-methyl), 9, PG III, Marine Pollutant

Freight Classification : Pesticides, NOI, Herbicides, Other than Poison (NMFC Item 155050, Sub 11, Class 70)

15. Regulatory Information

National Fire Protection Association Rating :

Health: 1 Fire: 1 Reactivity: 0
Rating Level: (4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

S.A.R.A Title III Hazard Classification (Yes/No) :

Immediate(Acute) Health: Y
Delayed (Chronic) Health: N
Sudden Release of N
Pressure:
Fire: N
Reactive: N

FIFRA Information : This Chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling 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:

EPA Registration Number : 84229-42-5905

FIFRA Signal Word : Caution

FIFRA Label Statement : Keep out of reach of children.

FIFRA Label Statement : Causes eye irritation.

FIFRA Label Statement : Avoid contact with skin, eyes or clothing.

FIFRA Label Statement : Avoid breathing dust or spray mist.

FIFRA Label Statement : No additional label statements.

FIFRA Label Statement : No additional label statements.

FIFRA Label Statement : No additional label statements.



Safety Data Sheet

Report
Date **19-May-16**

Page 5 of 5

16. Other Information

Data of Preparation/Revision : 19-May-2016