1. IDENTIFICATION

Product Identifier
Product Name

Quali-Pro MSM Turf

Other means of identification
SDS #
ADAMA-083a

Registration Number(s)
Reg. No. 66222-146
UN/ID No
UN3077

Recommended use of the chemical and restrictions on use
Recommended Use
EPA registered pesticide.

Details of the supplier of the safety data sheet
Manufacturer Address
Makhteshim Agan of North America, Inc. (d/b/a ADAMA)
3120 Highwoods Blvd., Suite 100
Raleigh, NC 27604
1-919-256-9300

Emergency Telephone Number
Emergency Telephone (24 hr)
For fire, spill and/or leak contact INFOTRAC:
1-800-535-5053 (North America) 1-352-323-3500 (International)
For medical emergencies and health/safety inquiries, contact PROSAR:
1-877-250-9291

2. HAZARDS IDENTIFICATION

This chemical is a product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-EPA registered chemicals. Please see Section 15 for additional EPA information.

Appearance Beige colored, small, longish granules
Physical State Solid
Odor Non-characteristic Very mild

Classification
Eye Damage/Irritation Category 2
Hazards Not Otherwise Classified (HNOC)
May be harmful in contact with skin

Signal Word
Warning

Hazard Statements
Causes serious eye irritation

Precautionary Statements - Prevention
Wash hands, face, and exposed skin thoroughly after handling

Precautionary Statements – Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so.
Continue rinsing.
If eye irritation persists: Get medical advice/attention

Other Hazards
Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metsulfuron- methyl. Benzoic acid, 2-(((4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino)carbonyl)amino)sulfonyle, methyl ester</td>
<td>74223-64-6</td>
<td>59.1-62.7</td>
</tr>
</tbody>
</table>

**If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

General Advice
When possible, have the product container or label with you when calling a poison control center or doctor for treatment.

Eye Contact
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a poison control center or doctor for treatment advice.

Skin Contact
Take off contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Call a poison control center or doctor for treatment advice.

Inhalation
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen if breathing is difficult. If breathing has stopped, call 911, give artificial respiration. Call a poison center or doctor/physician if you feel unwell.
Ingestion

Do not induce vomiting, unless directed by medical personnel. Get immediate medical attention. If conscious, give 1 glass of water to dilute. Never give anything by mouth to an unconscious person.

Most important symptoms and effects

Symptoms

May cause skin irritation with redness and swelling. Eye contact may result in irritation including redness, tearing, and blurred vision.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Foam. Carbon dioxide (CO2). Dry chemical. Water spray (fog).

Unsuitable Extinguishing Media

Not determined.

Specific Hazards Arising from the Chemical

May form explosive mixtures with air.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate area of unprotected personnel. Remain upwind of fire to avoid hazardous vapors and decomposition products. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Wear protective clothing as described in Section 8 of this safety data sheet. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

Environmental Precautions

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

Methods and material for containment and cleaning up

Methods for Containment

Prevent further leakage or spillage if safe to do so. Dike far ahead of spill; use dry sand to contain the flow of material.

Methods for Clean-Up

Avoid creating dust. Shovel into secured lid container for proper disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. Wash face, hands, and any exposed skin thoroughly after handling. Wash contaminated clothing before reuse. Avoid generation of dust. Avoid breathing dust or fume. Use only outdoors or in a well-ventilated area. Do not contaminate water, food, or feed by storage or disposal. Do not eat, drink or smoke when using this product.
Conditions for safe storage, including any incompatibilities

Storage Conditions: Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep out of the reach of children. Store at ambient conditions. Keep/store only in original container.

Packaging Materials: Do not reuse container.

Incompatible Materials: None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines: This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering Controls: Please refer to the product label. Use only with adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection: Use splash goggles or face shield when contact may occur.

Skin and Body Protection: Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Viton or other impervious gloves are required. Long sleeve shirt, trousers, and safety shoes.

Respiratory Protection: Ensure adequate ventilation, especially in confined areas. Wear an appropriate NIOSH/MSHA approved respirator if ventilation is inadequate.

General Hygiene Considerations: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Solid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Beige colored, small, longish granules</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Non-characteristic Very mild</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Beige</td>
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<td></td>
</tr>
<tr>
<td>pH</td>
<td>4.02</td>
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<tr>
<td>Melting Point/Freezing Point</td>
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<tr>
<td>Boiling Point/Boiling Range</td>
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<td></td>
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<tr>
<td>Flash Point</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
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</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
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<tr>
<td>Vapor Pressure</td>
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<tr>
<td>Vapor Density</td>
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<tr>
<td>Specific Gravity</td>
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<tr>
<td>Water Solubility</td>
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<td>Solubility in other solvents</td>
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<tr>
<td>Partition Coefficient</td>
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<td>Auto-ignition Temperature</td>
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<tr>
<td>Decomposition Temperature</td>
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<tr>
<td>Kinematic Viscosity</td>
<td>Not determined</td>
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</tbody>
</table>
10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Hazardous Polymerization
Hazardous polymerization does not occur.

Conditions to Avoid
See Sec. 7 Handling & Storage.

Incompatible Materials
None known.

Hazardous Decomposition Products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact
Avoid contact with eyes.

Skin Contact
May be harmful in contact with skin.

Inhalation
Do not inhale.

Ingestion
Do not ingest.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metsulfuron- Benzoic acid, 2-((((4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino)carbonyl)amino)sulfonyl), methyl ester</td>
<td>&gt; 5 g/kg (Rat)</td>
<td>&gt; 2 g/kg (Rabbit)</td>
<td>&gt; 5 g/m² (Rat) 4 h</td>
</tr>
</tbody>
</table>

Information on physical, chemical and toxicological effects

Symptoms
Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity
Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
Product Information (Numerical measures of toxicity)

Acute Oral LD50 (Rat): >5,000 mg/kg
Acute Dermal LD50 (Rabbit): >2,000 mg/kg
Acute Inhalation LC50 (Rat): >5.3 mg/L (4-hr)

Eye Irritation: Slightly irritating.
Dermal Irritation: Non-irritating.
Dermal Sensitization: Not a skin sensitizer.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Very toxic to aquatic life with long lasting effects. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply where runoff water may flow during periods of intense rainfall or to water-saturated soils, as off-target movement and injury may occur. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Do not apply this product through any type of irrigation system.

Persistence/Degradability
Not determined.

Bioaccumulation
Not determined.

Mobility
Not determined

Other Adverse Effects
Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes
Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

Contaminated Packaging
Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

DOT
Package size less than 882 Lbs. (400 Kg.): Not regulated
Package size larger than 882 Lbs. (400 Kg.):
UN3077, Environmentally hazardous substance, solid, n.o.s. (metsulfuron methyl), 9, PG III
Marine pollutant.

IATA
UN3077, Environmentally hazardous substance, solid, n.o.s. (metsulfuron methyl), 9, PG III

IMDG
UN3077, Environmentally hazardous substance, solid, n.o.s. (metsulfuron methyl), 9, PG III
Marine pollutant
15. REGULATORY INFORMATION

### International Inventories

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metsulfuron- Benzoic acid, 2-(((4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino)carbonyl)amino)sulfonyl)-methyl ester</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend:
- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- **EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- **ENCS** - Japan Existing and New Chemical Substances
- **IECSC** - China Inventory of Existing Chemical Substances
- **KECL** - Korean Existing and Evaluated Chemical Substances
- **PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- **AICS** - Australian Inventory of Chemical Substances

### US Federal Regulations

#### SARA 311/312 Hazard Categories

- **Acute Health Hazard**: Yes
- **Chronic Health Hazard**: No
- **Fire Hazard**: No
- **Sudden Release of Pressure Hazard**: No
- **Reactive Hazard**: No

#### SARA 313

Not determined

### US State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals.

#### U.S. State Right-to-Know Regulations

#### EPA Pesticide Registration Number

Reg. No. 66222-146

#### EPA Statement

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling 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 Pesticide Label**

Signal Word: Caution

- Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, and clothing.
### Difference between SDS and EPA pesticide label

<table>
<thead>
<tr>
<th></th>
<th>EPA</th>
<th>OSHA</th>
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</thead>
<tbody>
<tr>
<td><strong>Signal Word</strong></td>
<td>Caution</td>
<td>Warning</td>
</tr>
<tr>
<td><strong>Acute toxicity - Dermal</strong></td>
<td>Harmful if absorbed through skin</td>
<td>May be harmful in contact with skin</td>
</tr>
<tr>
<td><strong>Serious eye damage/eye irritation</strong></td>
<td>Causes moderate eye irritation</td>
<td>Causes serious eye irritation</td>
</tr>
</tbody>
</table>

### 16. OTHER INFORMATION

#### NFPA

<table>
<thead>
<tr>
<th></th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
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</table>

#### HMIS

<table>
<thead>
<tr>
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<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
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<tbody>
<tr>
<td></td>
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<td>See section 8</td>
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</tbody>
</table>

#### Issue Date:

27-Jul-2010

#### Revision Date:

06-Nov-2015

#### Revision Note:

Updated format from 13-Jan-2015

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**