ROMETSOL Herbicide
Safety Data Sheet

Date of issue: May 16, 2015
Version: 1.0

SECTION 1: Product and Company Identification

1.1. Product identifier
Trade name : ROMETSOL Herbicide
EPA Reg. No. : 83100-2-83979

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses
Use of the substance/mixture : Agricultural Herbicide

1.2.2. Uses advised against
No additional information available

1.3. Details of the supplier of the safety data sheet
Rotam North America, Inc.
4900 Kroger Blvd., Suite #140
Greensboro, NC 27407
Phone: 1-(866) 927-6826 (toll free); 1-(336) 346-8802
msds@rotam.com

1.4. Emergency telephone number
Emergency numbers : 1-800-858-7378 (NPIC)
1-800-222-1222 (Poison Control Center)
(800)-424-9300, (703)-527-3887 (CHEMTREC)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS Classification

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Category</th>
<th>Hazard Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious Eye Damage/Eye Irritation</td>
<td>2B</td>
<td>H320</td>
</tr>
<tr>
<td>Aquatic Toxicity – Acute</td>
<td>1</td>
<td>H400</td>
</tr>
<tr>
<td>Aquatic Toxicity – Chronic</td>
<td>1</td>
<td>H410</td>
</tr>
</tbody>
</table>

Full text of H-phrases appear in “Label elements” below

Adverse physicochemical, human health and environmental effects
No additional information available

2.2. Label elements

GHS Labeling Elements

Hazard pictograms (CLP) : 

<table>
<thead>
<tr>
<th>GHS07</th>
<th>GHS09</th>
</tr>
</thead>
</table>

Signal word (CLP) : Warning
Hazard statements (CLP): H320 – Causes eye irritation
H410 – Very toxic to aquatic life with long lasting effects

Precautionary statements:
P264 – Wash thoroughly after handling
P280 – Wear protective gloves and eye/face protection
P273 - Avoid release to the environment

Precautionary statements (response):
P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 – If eye irritation persists: Get medical advice or attention
P391 – Collect spillage.

Precautionary statements (disposal):
P501 – Dispose of contents/containers in accordance with local/regional/national/international regulations

2.3. Other hazards
No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>metsulfuron-methyl</td>
<td>(CAS No) 74223-64-6</td>
<td>60</td>
</tr>
<tr>
<td>Inert Ingredients</td>
<td>NA</td>
<td>40</td>
</tr>
</tbody>
</table>

3.2. Mixture
Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

IF INHALED: Move 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 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 irritation develops or persists.

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 poison control center or doctor for treatment advice if irritation develops or persists.

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 by a poison control center or doctor. Do not give anything to an unconscious person.

First-aid measures – general: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. See Label for Additional Precautions and Directions for Use.

Notes to Physician: The compound does not cause any definite symptoms that would be diagnostic. No specific antidote. Treat symptomatically.
4.2. **Most important symptoms and effects, both acute and delayed**

Symptoms/injuries: Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. **Indication of any immediate medical attention and special treatment needed**

No additional information available

**SECTION 5: Firefighting measures**

5.1. **Extinguishing media**


Unsuitable extinguishing media: High volume water jet. (Water contamination risk from runoff)

5.2. **Special hazards arising from the substance or mixture**

Fire hazard: Hazardous decomposition products may be released during prolonged heating include smoke, carbon monoxide and dioxide, nitrogen oxides (NOx).

Explosion hazard: Product is not explosive.

Reactivity: The product is stable at normal handling and storage conditions.

5.3. **Advice for firefighters**

Precautionary measures fire: Wear self-contained breathing apparatus and personal protective equipment (see Section 8). Prevent runoff from entering drains, sewers or waterways.

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

**SECTION 6: Accidental release measures**

6.1. **Personal precautions, protective equipment and emergency procedures**

General measures: Wear a self-contained breathing apparatus and appropriate personal protective equipment (PPE).

6.1.1. **For non-emergency personnel**

Protective equipment: Wear personal protective equipment.

Emergency procedures: Avoid inhalation of dust. Evacuate unnecessary personnel.

6.1.2. **For emergency responders**

Protective equipment: Wear a self-contained breathing apparatus and appropriate personal protective equipment (PPE). Equip cleanup crew with proper protection.

Emergency procedures: Ventilate area.

6.2. **Environmental precautions**

Do not allow material to contaminate ground water system. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.
6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials. Dispose of in accordance with regulations.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Do NOT get in eyes, on skin or on clothing. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of Vapor.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in original container. Store in a cool, dry place. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Keep out of the reach of children.

Incompatible products: Keep away from: strong acids, strong bases and oxidation agents.

Incompatible materials: Oxidizers, strong acids and strong bases. Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Talc, an inert ingredient in this product, has the following exposure limits:

OSHA (PEL-TWA): 20 mppcf (million particles per cubic foot)
AGCIH (TLV-TWA): 2 mg/m3 (respirable fraction)
NIOSH (REL-TWA): 2 mg/m3 (respirable dust)

8.2. Exposure controls

Personal protective equipment: Avoid all unnecessary exposure.
Hand protection: Wear protective gloves.
Eye protection: Chemical goggles or safety glasses.
Respiratory protection: Wear approved mask.
Other information: When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Solid
Appearance: Granule
Color: Off-white
Odor: Odorless
Odor threshold: No data available
pH: 5.5 (suspension)
### Relative evaporation rate
(butylacetate=1)
- No data available

### Melting point
- No data available

### Freezing point
- No data available

### Boiling point
- No data available

### Flash point
- No data available

### Self ignition temperature
- No data available

### Decomposition temperature
- No data available

### Flammability (solid, gas)
- Not flammable

### Vapor pressure
- 0

### Relative Vapor density at 20 °C
- No data available

### Relative density
- 0.634

### Solubility
- Slightly soluble

### Log Pow
- Active Ingredient - In purified water, Pow = 8.7 ± 1.2 and Log (Pow) = 0.93 ± 0.06; in buffered aqueous medium, Pow = 0.029 ± 0.003 and Log (Pow) = -1.54 ± 0.04

### Log Kow
- No data available

### Viscosity, kinematic
- No data available

### Viscosity, dynamic
- No data available

### Explosive properties
- No data available

### Oxidising properties
- Not an oxidizer

### Explosive limits
- Not explosive

### 9.2. Other information
No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity
The product is stable at normal handling and storage conditions.

#### 10.2. Chemical stability
Stable under normal conditions. Not established.

#### 10.3. Possibility of hazardous reactions
Not established.

#### 10.4. Conditions to avoid
All heat sources. Direct sunlight. Extremely high or low temperatures.

#### 10.5. Incompatible materials
Strong acids, strong bases and oxidation agents.

#### 10.6. Hazardous decomposition products
Heavy smoke. Carbon monoxide. Carbon dioxide.
**SECTION 11: Toxicological information**

11.1. Information on toxicological effects

Acute toxicity: Not classified

<table>
<thead>
<tr>
<th>Compound</th>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>metsulfuron-methyl (Stillmeadow)</td>
<td>LD50 oral rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>LD50 dermal rat</td>
<td>&gt; 5050 mg/kg</td>
</tr>
<tr>
<td></td>
<td>LC50 inhalation rat (mg/l)</td>
<td>&gt; 6.22 mg/l</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Not irritant to skin

Serious eye damage/irritation: Causes eye irritation.

Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): Not classified

Specific target organ toxicity (repeated exposure): Not classified

Aspiration hazard: Not classified

Potential Adverse human health effects and symptoms: Based on available data, the classification criteria are not met.

**SECTION 12: Ecological information**

12.1. Toxicity

Ecology - water: Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Compound</th>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>metsulfuron-methyl</td>
<td>LC50 fishes 1</td>
<td>&gt; 200 ml/l</td>
</tr>
<tr>
<td>(TECAM)</td>
<td>EC50 Daphnia 1</td>
<td>51.76 ml/l</td>
</tr>
<tr>
<td></td>
<td>ErC50 (algae)</td>
<td>0.5 mg/l</td>
</tr>
<tr>
<td></td>
<td>ErC50 (other aquatic plants)</td>
<td>0.00036 mg/l Lemna gibba (EPM)</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

metsulfuron-methyl (74223-64-6)

Persistence and degradability: May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

metsulfuron-methyl (74223-64-6)

Bioaccumulative potential: Not established.
12.4. Mobility in soil
No additional information available

12.5. Results of PBT and vPvB assessment
No additional information available

12.6. Other adverse effects
Other information: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste disposal recommendations: Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

In accordance with US DOT / TDG (Canada) / IMDG / ICAO/IATA

Not Regulated by US DOT or Canadian TDG for ground shipment

This product is regulated by ocean (IMDG) and air (ICAO/IATA) as follows:

14.1. UN number
UN-No.: 3077

14.2. UN proper shipping name
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Metsulfuron-methyl)
Transport document description: UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Metsulfuron-methyl), 9, III

14.3. Transport hazard class(es)
Class: 9
Hazard label(s): 

14.4. Packing group
Packing group: III

14.5. Environmental hazards
Dangerous for the environment:

Other information: No additional information available.
SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

FIFRA Information:
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:

<table>
<thead>
<tr>
<th>Signal word</th>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard statements</td>
<td>Causes eye irritation.</td>
</tr>
<tr>
<td>Precautionary statements</td>
<td>Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist.</td>
</tr>
</tbody>
</table>

SARA 313 Regulated Chemical(s): Not applicable

Title III hazard classification:
Acute Health Hazard: Yes
Chronic Health Hazard: No
Fire: No
Reactivity/Physical hazard: No
Pressure: No

Canadian Regulatory Information:
This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR. WHMIS Classification: Class D2B – Toxic.

SECTION 16: Other information

| NFPA: | Health: 1; Flammability: 1; Reactivity: 0; Specific: |
| HMIS: | Health: 1; Flammability: 1; Physical Hazard: 0; PPE: E |

US SDS

Disclaimer: The information provided by Rotam Agrochemical Co., Ltd contained herein is given in good faith and correct to the best of our knowledge. However, the information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.