1. IDENTIFICATION

Product name: **Pramitol® 25E Herbicide**
Chemical name of active ingredient(s): Prometon (25%): 2,4-bis(isopropylamino)-6-methoxy-s-triazine (CAS #1610-18-0)
Chemical Class: Triazine Herbicide
Manufacturer/Registrant: Makhteshim-Agan of North America
551 Fifth Avenue, Suite 1100
New York, NY 10176
Phone: 212-661-9800

For fire, spill, and/or leak emergencies, contact Infotrac:
Phone: 1-800-535-5053
For medical emergencies and health and safety inquiries, contact Prosar:
Phone: 1-877-250-9291

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>OTHER</th>
<th>NTP/IARC/OSHA Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surfactants</td>
<td>N/E</td>
<td>N/E</td>
<td>N/E</td>
<td>No</td>
</tr>
<tr>
<td>Petroleum Solvents</td>
<td>N/E</td>
<td>N/E</td>
<td>25 ppm*</td>
<td>No</td>
</tr>
<tr>
<td>Xylene</td>
<td>100 ppm</td>
<td>100 ppm TWA</td>
<td>N/E</td>
<td>IARC 3</td>
</tr>
<tr>
<td>O-Xylene</td>
<td>100 ppm</td>
<td>100 ppm TWA</td>
<td>N/E</td>
<td>No</td>
</tr>
<tr>
<td>Ethyl Benzene</td>
<td>100 ppm</td>
<td>100 ppm TWA 125 ppm STEL</td>
<td>N/E</td>
<td>IARC 2</td>
</tr>
<tr>
<td>1,2,4-Trimethyl-benzene</td>
<td>N/E</td>
<td>25 ppm TWA</td>
<td>N/E</td>
<td>No</td>
</tr>
<tr>
<td>N-Butanol</td>
<td>100 ppm</td>
<td>N/E</td>
<td>50 ppm ACGIH Ceiling</td>
<td>No</td>
</tr>
<tr>
<td>Ethylene Glycol Mono Ether</td>
<td>N/E</td>
<td>N/E</td>
<td>39.4 ppm ACGIH Ceiling</td>
<td>No</td>
</tr>
<tr>
<td>Prometon (25%)</td>
<td>N/E</td>
<td>N/E</td>
<td>N/E</td>
<td>No</td>
</tr>
</tbody>
</table>

N/E=Not Established
*recommended by manufacturer

3. HAZARDS IDENTIFICATIONS

NOTES TO PHYSICIAN
- There is no specific antidote if product is ingested.
- Induction of emesis is not recommended due to the large amount of petroleum solvent in this product, which could cause chemical pneumonitis if aspirated. If ingested, lavage stomach, taking care to avoid aspiration of stomach contents into lungs.
- Check for possible mucosal damage before beginning gastric lavage.
- If inhaled, observe for delayed onset of pulmonary edema.
- Treat central nervous system effects symptomatically.
- Contact with eyes may require specialized ophthalmologic attention.
- An aqueous suspension of activated charcoal can be administered to absorb remaining toxicant.

SYMPTOMS OF ACUTE EXPOSURE
Exposure may cause substantial but temporary eye injury and severe skin irritation. If swallowed, abdominal pain, nausea, vomiting, gastritis, weakness, headache, or diarrhea can occur. Prolonged inhalation exposure may cause respiratory tract irritation and central nervous system depression, resulting in headache, dizziness, blurred vision or nausea. The petroleum solvent in this product can cause a chemical pneumonitis if aspirated.
HAZARDOUS DECOMPOSITION PRODUCTS
None known.

PHYSICAL PROPERTIES
Appearance: Yellow to amber liquid
Odor: Aromatic solvent odor

UNUSUAL FIRE, EXPLOSION AND REACTIVITY HAZARDS
This product is a flammable material and forms flammable mixtures above 77°F. Thermal decomposition products may include, but are not limited to, carbon monoxide or carbon dioxide.

4. FIRST AID

| 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. |

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

NOTES TO PHYSICIAN:
• Contains petroleum distillate; vomiting may cause aspiration pneumonia. Probable mucosal damage may contraindicate the use of gastric lavage. Check for possible mucosal damage before beginning gastric lavage. Treat for circulatory shock, respiratory depression, and convulsions, if needed.
• There is no specific antidote if product is ingested.
• Induction of emesis is not recommended due to the large amount of petroleum solvent in this product, which could cause chemical pneumonitis if aspirated. If ingested, lavage stomach taking care to avoid aspiration of stomach contents into lungs.
• If inhaled, observe for delayed onset of pulmonary edema.
• Treat central nervous system effects symptomatically.
• Contact with eyes may require specialized ophthalmologic attention.
• An aqueous suspension of activated charcoal can be administered to absorb remaining toxicant.

MEDICAL CONDITION(S) LIKELY TO BE AGGRAVATED BY EXPOSURE
Individuals with chronic respiratory disorders or pre-existing dermatitis should use extra care when handling this product.

5. FIRE FIGHTING MEASURES

FLASH POINT (Test Method): 98°F (TCC)  
FLAMMABLE LIMITS (%in Air): LFL: 1.3%, UFL: 4.9%±0.25% by volume @ 60°C  
AUTOIGNITION TEMPERATURE: 340°C  
FLAMMABILITY: Not Applicable  
EXTINGUISHING MEDIA: Use dry chemical, foam, or CO₂.  
FIRE & EXPLOSION HAZARDS: This product is a flammable material and forms flammable mixtures above 77°F. Thermal decomposition products may include, but are not limited to, carbon monoxide or carbon dioxide.
FIRE-FIGHTING EQUIPMENT: Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes, or products of combustion. Prevent use of contaminated buildings, area and equipment until decontaminated.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS/LEAKS: Wear chemical goggles of a full-face shield, rubber gloves, rubber boots, long-sleeved shirt, long pants, head covering, and a NIOSH-approved full-face chemical cartridge respirator with organic vapor cartridges and pesticide pre-cartridges of a self-contained breathing apparatus (SCBA). For small spills, cover with an absorbent material such pet litter. Sweep up and place in an approved chemical container. Wash the spill area with water containing a strong detergent, absorb with pet litter or other absorbent material, sweep up and place in a chemical container. Seal the container and handle in an approved manner. Flush the area with water to remove any residue. Do not allow wash water to contaminate water supplies.

7. HANDLING AND STORAGE

Store material in a well-ventilated, secure area out of the reach of children and domestic animals. Store above 32°F. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco usage, and cosmetic application in areas where there is a potential for exposure to the material. Always wash thoroughly after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

INGESTION: Prevent eating, drinking, tobacco usage, and cosmetic application in areas where there is a potential for exposure to the material. Always wash thoroughly after handling.

EYE PROTECTION: To avoid eye contact, wear chemical goggles or full-face shield.

SKIN PROTECTION: To avoid skin contact, wear rubber gloves, rubber boots, long-sleeved shirt, long pants and a head covering. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse. Items, which cannot be decontaminated, such as shoes, belts, and watchbands, should be removed, destroyed, and disposed of.

RESPIRATORY PROTECTION: To avoid breathing mist or spray, wear a NIOSH-approved full-face chemical cartridge respirator with organic vapor cartridges and pesticide pre-cartridges or a supplied air respirator.

APPLICATORS AND ALL OTHER HANDLERS: Please refer to the product label for personal protective clothing and equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: 120-130°C
MELTING POINT: Not Applicable
VAPOR PRESSURE: Prometon: 3.10E-06 mbar @ 20°C
SOLUBILITY IN WATER: Prometon: 0.7 g/L @ 22°C
SPECIFIC GRAVITY: 7.80 lbs./gallon
pH: 7-8
APPEARANCE: Yellow to amber liquid
ODOR: Aromatic solvent odor

10. STABILITY AND REACTIVITY

STABILITY: Stable
CONDITIONS TO AVOID: Strong Acids
HAZARDOUS DECOMPOSITION PRODUCTS: None Known
HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES

Ingestion:
- Slightly toxic
- Oral LD_{50} (Rat) 2,100 mg/kg body weight
Dermal:  
- Slightly toxic  
- Dermal LC$_{50}$ (Rabbit) 2,000-2,500 mg/kg body weight  

Inhalation:  
- Slightly toxic  
- Dermal LC$_{50}$ (Rat) >2.5 mg/l air-4 hours  

Eye Contact: severely irritating (Rabbit)  
Skin Contact: severely irritating (Rabbit)  
Skin Sensitization: Not Available  

MUTAGENIC POTENTIAL  
Prometon: None observed  

REPRODUCTIVE HAZARD POTENTIAL  
Prometon: None observed  

CHRONIC/SUBCHRONIC TOXICITY STUDIES  
Prometon: Liver effects (mice)  

CARCINOGENIC POTENTIAL  
Prometon: None observed  

OTHER TOXICITY INFORMATION  
Not Available  

TOXICITY OF OTHER COMPONENTS  
Ethylene Glycol Mono Phenyl Ether:  
Exposure will result in severe eye irritation and moderate corneal injury. Liver, kidney, thyroid, and blood effects have been observed in animal studies.  

N-Butanol:  
Prolonged exposure to N-Butanol may result in drying and cracking of skin from a defatting action. There is evidence that long-term repeated exposure to vapor concentrations greater than 50 ppm may result in some loss of hearing. N-Butanol vapor can cause specific injury to the cornea. Irritation of the skin and respiratory tract may occur with brief exposures. Causes severe irritation to the eyes with lacrimation. Inhalation of N-Butanol may result in loss of consciousness, headache, dizziness, nausea, drowsiness and vomiting.  

Petroleum Solvent:  
The supplier reports that inhalation of high vapor concentrations (over 1,000 ppm) may cause central nervous system effects such as headache, dizziness, anesthesia and respiratory tract irritation.  

Surfactants:  
Small amounts of several surfactants have been reported by the manufacturers to cause skin irritation upon prolonged or repeated contact.  

TARGET ORGANS  
Active Ingredients:  
- Prometon: Liver  

Inert Ingredients:  
- Ethylene Glycol Mono Phenyl Ether: Liver, Kidney, Thyroid, Blood, and Eyes  
- N-Butanol: Respiratory Tract, Inner Ear, Eyes, and Skin  
- Petroleum Solvent: Respiratory Tract, Central Nervous System and Skin  
- Surfactants: Skin  

12. TOXICOLOGICAL INFORMATION  

Summary of Effects  
Prometon: Practically nontoxic to birds and slightly toxic to aquatic invertebrates and fish  

Eco-Acute Toxicity  
Prometon:  
- Rainbow Trout 96-hour LC$_{50}$ 19.6 mg/L  
- Bluegill Sunfish 96-hour LC$_{50}$ 41.5 mg/L  
- Daphnia magna 48-hour LC$_{50}$ 37.5 mg/L  
- Bobwhite Oral LD$_{50}$ >2,264 mg/kg  
- Mallard Oral LD$_{50}$ 3,158 mg/kg
13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Ignitable

LISTED WASTE: NA

14. TRANSPORT INFORMATION

DOT Classification: Compounds, Tree or Weed Killing Liquid, (xylene), 3, NA 1993, PGIII
For containers 1 gallon or less: Consumer Commodity ORM-D (Household Weed Killing Liquid)

B/L Freight Classification: Item 50320 [Compounds, tree or weed killing (herbicides), NOI, other than poison], Class 60

IMO Classification:
Package size - 4 X 1-gallon, 12 X 1-quart
   Limited Quantity exemption - no markings, labels or placards required.
   Dangerous goods in limited quantities of class 3, UN 1993, PG III

Package size - 2 X 2.5-gallon
   Flammable Liquid, N.O.S., (xylene), 3, UN 1993, PG III
   Class 3 labels and placards required.

15. REGULATORY INFORMATION

SARA TITLE III CLASSIFICATION
Section 311/312
Acute Health Hazard
Chronic Health Hazard
Fire Hazard

Section 313 Chemical(s)
1,2,4-Trimethylbenzene (CAS No. 95-63-6) – 13%
Ethyl Benzene (CAS NO. 100-41-4) – 2%
O-Xylene (CAS No. 95-47-6) – 5%
Xylene (CAS No. 1330-20-7) – 5%
N-Butanol. (CAS No. 71-36-3) – 10%
Ethylene Glycol Mono Phenyl Ether (CAS No. 122-99-6) – 10%

Proposition 65
Not Applicable

CERCLA Reportable Quantity (RQ)
1,280 gallons (based on xylene [RQ=100] content in formulation)

RCRA Classification
Ignitable

TSCA Status
Exempt from TSCA
## 16. OTHER INFORMATION

**NFPA Hazard Ratings**

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2</td>
<td>0 Least</td>
</tr>
<tr>
<td>Flammability</td>
<td>3</td>
<td>1 Slight</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
<td>2 Moderate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 High</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 Severe</td>
</tr>
</tbody>
</table>

**MSDS Revised Date:** 04/14/04; Supersedes 2/14/00, 1/18/99, 8/4/00, 10/18/01, 6/12/02, 4/15/03 and 5/1/03; Changes made to Section 15.

The information and recommendations herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

For additional information about this product, contact Makhteshim-Agan of North America, 551 Fifth Avenue, Suite 1100, New York, NY 10176, (212) 661-9800.