MATERIAL SAFETY DATA SHEET Pramitol® 25E Herbicide, EPA Reg. No. 66222-22

Page 1 of 6

1. IDENTIFICATION

Chemical Class:

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) Triazine Herbicide

Manufacturer/Registrant: Makhteshim-Agan of North America

551 Fifth Avenue, Suite 1100

New York, NY 10176 Phone: 212-661-9800 Phone: 1-800-535-5053

For fire, spill, and/or leak emergencies, contact

Infotrac:

For medical emergencies and health and safety inquiries, contact Product Safety

Resources:

Phone: 1-877-250-9291

2. COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	OSHA PEL	ACGIH TLV	OTHER	NTP/IARC/OSHA Carcinogen
Surfactants	N/E	N/E	N/E	No
Petroleum Solvents	N/E	N/E	25 ppm*	No
Xylene	100 ppm	100 ppm TWA 150 ppm STEL	N/E	IARC 3
O-Xylene	100 ppm	100 ppm TWA 150 ppm STEL	N/E	No
Ethyl Benzene	100 ppm	100 ppm TWA 125 ppm STEL	N/E	IARC 2
1,2,4- Trimethyl- benzene	N/E	25 ppm TWA	N/E	No
N-Butanol	100 ppm	N/E	50 ppm ACGIH Ceiling	No
Ethylene Glycol Mono Ether	N/E	N/E	39.4 ppm ACGIH Ceiling	No
Prometon (25%)	N/E	N/E	N/E	No

N/E=Not Established

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,

^{*}recommended by manufacturer

Pramitol® 25E Herbicide, EPA Reg. No. 66222-22

Page 2 of 6

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	Take off contaminated clothing.		
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.

MATERIAL SAFETY DATA SHEET **Pramitol® 25E Herbicide**, EPA Reg. No. 66222-22 Page 3 of 6

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.

Pramitol® 25E Herbicide, EPA Reg. No. 66222-22

Page 4 of 6

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES

Ingestion:

Slightly toxic

Oral LD₅₀ (Rat) 2,100 mg/kg body weight

Dermal:

Slightly toxic

Dermal LC₅₀ (Rabbit) 2,000-2,500 mg/kg body weight

Inhalation:

Slightly toxic

Dermal LC₅₀ (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

Pramitol® 25E Herbicide, EPA Reg. No. 66222-22

Page 5 of 6

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 LC₅₀ 19.6 mg/L Bluegill Sunfish 96-hour LC₅₀ 41.5 mg/L Daphnia magna 48-hour LC₅₀ 37.5 mg/L Bobwhite Oral LD₅₀ >2,264 mg/kg Mallard Oral LD₅₀ 3,158 mg/kg Bobwhite 8-day Dietary LC₅₀ >5,620 ppm

Bobwhite 8-day Dietary LC₅₀ >5,620 ppm Mallard 8-day Dietary LC₅₀ >5,620 ppm

Eco-Chronic Toxicity

Prometon:

Fish (Fathead minnow) Early Life Stage MATC 13.7 mg/L Invertebrate (Daphnia Magna) Life Cycle MATC 4.83 mg/L Mallard Reproduction NOEC 50 ppm Bobwhite Reproduction NOEC 175 ppm

Environmental Fate

Prometon:

Not Available

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-Trimethybenzene (CAS No. 95-63-6)

Ethyl Benzene (CAS NO. 100-41-4)

O-Xylene (CAS No. 95-47-6)

Xylene (CAS No. 1330-20-7)

Pramitol® 25E Herbicide, EPA Reg. No. 66222-22

Page 6 of 6

N-Butanol. (CAS No. 71-36-3)

Ethylene Glycol Mono Phenyl Ether (CAS No. 122-99-6)

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

Health: 2 0 Least Flammability: 3 1 Slight 2 Reactivity: 0 Moderate 3 High 4 Severe

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

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.