1. IDENTIFICATION

Product Identifier
Product Name

Pramitol 5PS

Other means of identification
SDS #
ADAMA-093

Registration Number(s)
Reg. No. 66222-23

UN/ID No
UN1759

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 White pellet
Physical State Solid
Odor Odorless

Classification

Acute toxicity – Inhalation (Dusts/Mists)
Category 4

Signal Word
Warning

Hazard Statements
Harmful if inhaled
Precautionary Statements - Prevention
Do not breathe dust/mist
Use only outdoors or in a well-ventilated area

Precautionary Statements - Response
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a poison center or doctor/physician if you fell unwell

Other Hazards
Toxic to aquatic life with long lasting effects

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prometon</td>
<td>1610-18-0</td>
<td>4.6-5.33</td>
</tr>
<tr>
<td>Sodium tetraborate</td>
<td>1330-43-4</td>
<td>38.8-44.2</td>
</tr>
<tr>
<td>Proprietary Alkaline</td>
<td>Proprietary</td>
<td>&lt;25</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 or going 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. Immediately call a poison center or doctor/physician.

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.

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
If swallowed, mucous membranes may be damaged, resulting in breathing difficulty, abdominal pain, nausea, vomiting, gastritis, weakness, or diarrhea. Ingestion of a large amount can lead to cyanosis and hematuria (blood in the urine).
Indication of any immediate medical attention and special treatment needed

Notes to Physician  Treat symptomatically. Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media  Foam. Carbon dioxide (CO₂). Dry chemical.

Unsuitable Extinguishing Media  Not determined.

Specific Hazards Arising from the Chemical  Corrosive material.

Hazardous Combustion Products  Reaction of sodium chlorate with acids releases chlorine and chlorine dioxide vapors which may ignite or explode spontaneously. However, in this formulation the active ingredients are neutralized.

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.

Methods for Clean-Up  Avoid creating dust. Sweep up dry spills and place in a container for recovery or disposal. Wash spill area with a strong detergent and water solution; rinse with water, but minimize water use during clean-up. Do not flush to sewer. Absorb rinsate with appropriate absorbent and transfer this material to a properly labeled container for 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. Follow all product label instructions. Use only as directed. Avoid generation of dust. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. Do not breathe dust.

Conditions for safe storage, including any incompatibilities


Packaging Materials  Do not reuse container.
Incompatible Materials  

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium tetraborate</td>
<td>STEL: 6 mg/m³ inhalable fraction</td>
<td>(vacated) TWA: 10 mg/m³</td>
<td>TWA: 1 mg/m³</td>
</tr>
<tr>
<td>1330-43-4</td>
<td>TWA: 2 mg/m³ inhalable fraction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proprietary Alkaline</td>
<td>Ceiling: 2 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td>IDLH: 10 mg/m³</td>
</tr>
<tr>
<td></td>
<td>(vacated) Ceiling: 2 mg/m³</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Solid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>White pellet</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>White</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>10</td>
<td>@ 25°C (1% solution in water)</td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>89-91 C / 192-195 F</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Liquid-not applicable</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>3.10E -06 mbar @ 20°C (Prometon)</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>0.7 g/L @ 22°C (Prometon)</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
</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

Hazardous Decomposition Products
Reaction of sodium chlorate with acids releases chlorine and chlorine dioxide vapors which may ignite or explode spontaneously. However, in this formulation the active ingredients are neutralized.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact
Avoid eye contact.

Skin Contact
Avoid skin contact.

Inhalation
Harmful if inhaled.

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>Sodium tetraborate</td>
<td>= 2403 mg/kg (Rat)</td>
<td>&gt; 2000 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>1330-43-4</td>
<td>-</td>
<td>= 1350 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>Proprietary Alkaline</td>
<td>= 503 mg/kg (Rat)</td>
<td>&gt; 2500 mg/kg (Rat) = 2200 mg/kg (Rabbit)</td>
<td>= 36 g/m³ (Rat) 4 h</td>
</tr>
<tr>
<td>Prometon 1610-18-0</td>
<td>-</td>
<td>-</td>
<td></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.
Reproductive toxicity

Sodium Borate: Sodium borate and boric acid interfere with sperm production, damage the testes and interfere with male fertility when given to animals by mouth at high doses. Boric acid produces developmental effects, including reduced body weight, malformations and death, in the offspring of pregnant animals given boric acid by mouth. The above mentioned animal studies were conducted under exposure conditions leading to doses many times in excess of those that could occur through product use or inhalation of dust in occupational settings. Moreover, a human study of occupational exposure to sodium borate and boric acid dusts showed no adverse effect on fertility.

Product Information (Numerical measures of toxicity)

<table>
<thead>
<tr>
<th></th>
<th>Acute Oral LD50 (Rat): 3,396 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Dermal LD50 (Rabbit):</td>
<td>&gt;2,020 mg/kg</td>
</tr>
<tr>
<td>Acute Inhalation LC50 (Rat):</td>
<td>&gt;3.727 mg/L (4-hr)</td>
</tr>
</tbody>
</table>

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

12. ECOLOGICAL INFORMATION

Ecotoxicity
Toxic to aquatic life with long lasting effects. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium tetraborate 1330-43-4</td>
<td>158: 96 h Desmodesmus subspicatus mg/L EC50 2.6 - 21.8: 96 h</td>
<td>340: 96 h Limanda limanda mg/L LC50</td>
<td>1085 - 1402: 48 h Daphnia magna mg/L LC50</td>
<td></td>
</tr>
<tr>
<td>Proprietary Alkaline</td>
<td></td>
<td>45: 96 h Oncorhynchus mykiss mg/L LC50 static</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.
California Hazardous Waste Status

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Additive</td>
<td>Toxic</td>
</tr>
<tr>
<td></td>
<td>Corrosive</td>
</tr>
</tbody>
</table>

### 14. TRANSPORT INFORMATION

**DOT**
- Not regulated

**IATA**
- Not regulated

**IMDG**
- Marine Pollutant
  - This material may meet the definition of a 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>Sodium tetraborate</td>
<td>Present</td>
<td>X</td>
<td></td>
<td>Present</td>
<td></td>
<td>X</td>
<td></td>
<td>Present</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Proprietary Alkaline</td>
<td>Present</td>
<td>X</td>
<td></td>
<td>Present</td>
<td></td>
<td>X</td>
<td></td>
<td>Present</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Prometon</td>
<td>Present</td>
<td></td>
<td></td>
<td>Present</td>
<td></td>
<td></td>
<td></td>
<td></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

**CERCLA**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Alkaline</td>
<td>1000 lb</td>
<td></td>
<td>RQ 1000 lb final RQ RQ 454 kg final RQ</td>
</tr>
</tbody>
</table>

**SARA 311/312 Hazard Categories**

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

**SARA 313**
- Not determined

**CWA (Clean Water Act)**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Alkaline</td>
<td>1000 lb</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium tetraborate</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>1330-43-4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proprietary Alkaline</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

EPA Pesticide Registration Number Reg. No. 66222-23

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: Warning

Causes substantial but temporary eye injury. Harmful if swallowed, inhaled, or absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing dust. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing after reuse.

EPA and OSHA differences

<table>
<thead>
<tr>
<th>Signal Word</th>
<th>EPA</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
<td>Harmful if swallowed</td>
<td>N/A</td>
</tr>
<tr>
<td>Acute toxicity - Dermal</td>
<td>Harmful if absorbed</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>through skin</td>
<td></td>
</tr>
<tr>
<td>Acute toxicity - Inhalation</td>
<td>Harmful if inhaled</td>
<td>Harmful if inhaled</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Causes substantial but temporary eye injury</td>
<td>N/A</td>
</tr>
</tbody>
</table>
16. OTHER INFORMATION

NFPA
- Health Hazards: 2
- Flammability: 0
- Instability: 0
- Special Hazards: None

HMIS
- Health Hazards: 2
- Flammability: 0
- Physical Hazards: 0
- Personal Protection: See section 8

Issue Date: 19-Nov-2009
Revision Date: 20-Nov-2015
Revision Note: Updated format from 27-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 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