1. IDENTIFICATION

Product Identifier
Product Name
Impose

Other means of identification
SDS #
ADAMA-026
Registration Number(s)
EPA Reg. No. 66222-141
UN/ID No
UN3082

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. The product contains no substances which, at their given concentration, are considered to be hazardous to health.

Appearance
Yellow to green liquid
Physical State
Liquid
Odor
Faint odor

Classification

Acute toxicity – inhalation (Dusts/Mists) Category 4

Signal Word
Warning

Hazard Statements
Harmful if inhaled
Precautionary Statements - Prevention
Avoid breathing dust/mist
Use only outdoors or in a well-ventilated area

Precautionary Statements - Response
IF INHALED: Remove person to fresh air and keep comfortable for breathing
Call a poison center/doctor if you feel unwell

Other Hazards
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>Ammonium salt of imazapic</td>
<td>104098-49-9</td>
<td>23.3</td>
</tr>
<tr>
<td>Ammonia Solution 25%</td>
<td>1336-21-6</td>
<td>5.4</td>
</tr>
<tr>
<td>Proprietary Alkaline</td>
<td>Proprietary</td>
<td>&lt;2</td>
</tr>
<tr>
<td>Proprietary Acid</td>
<td>Proprietary</td>
<td>&lt;1</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**
IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.

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

**Skin Contact**
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Wash skin with soap and water. If skin irritation occurs: Get medical advice/attention.

**Inhalation**
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion**
Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Immediately call a poison center or doctor/physician.

**Most important symptoms and effects**

**Symptoms**
Causes skin irritation. Causes serious eye irritation.
Indication of any immediate medical attention and special treatment needed

Notes to Physician  Treat symptomatically.

5. FIRE-FIGHTING MEASURES

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

Unsuitable Extinguishing Media  Not determined.

Specific Hazards Arising from the Chemical
Product is not flammable.

Hazardous Combustion Products  Carbon monoxide. Carbon dioxide (CO2). Nitrogen oxides (NOx).

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  Cover liquid spill with sand, earth or other non-combustible absorbent material. Sweep up and shovel into suitable containers for disposal. Dispose of in accordance with federal, state and local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling  Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment as required. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing. Use only outdoors or in a well-ventilated area.

Conditions for safe storage, including any incompatibilities
Storage Conditions
Do not contaminate water, food, or feed by storage or disposal. Keep/store only in original container. Protect from excessive heat. Keep container tightly closed and store in a cool, dry and well-ventilated place. Do not store below 20°F (-7°C). Do not store at temperatures above 40°C/104°F. Protect container from physical damage. Protect from contamination. Store away from sources of ignition.

Packaging Materials
Do not reuse container.

Incompatible Materials
None known based on information supplied.

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>Proprietary Acid</td>
<td>STEL: 15 ppm TWA: 10 ppm</td>
<td>TWA: 10 ppm TWA: 25 mg/m³ (vacated) TWA: 10 ppm TWA: 25 mg/m³ (vacated) TWA: 15 ppm TWA: 37 mg/m³</td>
<td>IDLH: 50 ppm TWA: 10 ppm TWA: 25 mg/m³ STEL: 15 ppm STEL: 37 mg/m³</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
Wear safety glasses with side shields (or goggles).

Skin and Body Protection
Wear appropriate clothing to prevent repeated or prolonged skin contact. Wear long-sleeved shirt, long pants, and shoes plus socks. Use chemical resistant gloves, such as P.V.C., butyl-rubber, nitrile-rubber, or neoprene.

Respiratory Protection
NIOSH-approved respirator or mask in the absence of adequate ventilation.

General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Take off all contaminated clothing and wash it before reuse. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product’s concentrate. Do not reuse them. Follow manufacturer’s instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| Physical State | Liquid |
| Appearance | Yellow to green liquid |
| Color | Yellow to green |
| Odor | Faint odor |
| Odor Threshold | Not determined |

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>6.0-7.0</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</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

Incompatible Materials
None known based on information supplied.

Hazardous Decomposition Products
Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NOₓ).

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 taste or swallow.
Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
--- | --- | --- | --- |
Proprietary Alkaline | = 350 mg/kg (Rat) | - | - |
Proprietary Acid | = 3310 mg/kg (Rat) | = 1060 mg/kg (Rabbit) | = 11.4 mg/L (Rat) 4 h |

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**  
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):** >5,000 mg/kg  
**Acute Inhalation LC50 (Rat):** >2.38 mg/L (4-hr)  
**Eye Irritation:** Non-irritating.  
**Dermal Irritation:** Non-irritating.  
**Dermal Sensitization:** Not a skin sensitizer.

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity**  
Toxic to aquatic life with long lasting effects. Harmful to aquatic life. 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 contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate. This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

**Component Information**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicty to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Alkaline</td>
<td></td>
<td>8.2: 96 h Pimephales promelas mg/L LC50</td>
<td>EC50 = 8.8 mg/L 15 min EC50 = 8.8 mg/L 25 min EC50 = 8.8 mg/L 5 min</td>
<td>0.66: 48 h water flea mg/L EC50 0.66: 48 h Daphnia pulex mg/L EC50</td>
</tr>
<tr>
<td>Proprietary Acid</td>
<td>79: 96 h Pimephales promelas mg/L LC50 static 75: 96 h Lepomis macrochirus mg/L LC50 static</td>
<td>EC50 = 8.8 mg/L 15 min EC50 = 8.8 mg/L 25 min EC50 = 8.8 mg/L 5 min</td>
<td>47: 24 h Daphnia magna mg/L EC50 65: 48 h Daphnia magna mg/L EC50 Static</td>
<td></td>
</tr>
</tbody>
</table>

**Persistence/Degradability**  
Not determined.

**Bioaccumulation**  
Not determined.

**Mobility**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Acid</td>
<td>-0.31</td>
</tr>
</tbody>
</table>

**Other Adverse Effects**  
Not determined

### 13. DISPOSAL CONSIDERATIONS
Waste Treatment Methods

Disposal of Wastes

END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.
Pesticide wastes are acutely hazardous. 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 at the nearest EPA Regional Office for guidance.
Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

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 Alkaline</td>
<td>Toxic</td>
</tr>
<tr>
<td></td>
<td>Corrosive</td>
</tr>
<tr>
<td>Proprietary Acid</td>
<td>Toxic</td>
</tr>
<tr>
<td></td>
<td>Corrosive</td>
</tr>
<tr>
<td></td>
<td>Ignitable</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT

Package size less than 119 Gallons (450 Lt.): Not regulated
Package size over 119 Gallons (450 Lt.):
UN3082, Environmentally hazardous substances, liquid, n.o.s. (Imazapic), 9, PGIII, Marine pollutant.

IATA

UN/ID No: UN3082
Proper Shipping Name: Environmentally hazardous substances, liquid, n.o.s. (Imazapic)
Hazard Class: 9
Packing Group: III
Description: Marine Pollutant

IMDG

UN/ID No: UN3082
Proper Shipping Name: Environmentally hazardous substances, liquid, n.o.s. (Imazapic)
Hazard Class: 9
Packing Group: III
Marine Pollutant: This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO
## 15. REGULATORY INFORMATION

### International Inventories

**TSCA**

All ingredients are listed or exempt from listing on Chemical Substance Inventory

Legend:

- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

### 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</td>
</tr>
<tr>
<td>Proprietary Acid</td>
<td>5000 lb</td>
<td></td>
<td>RQ 5000 lb final RQ</td>
</tr>
</tbody>
</table>

#### 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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Alkaline</td>
<td>Proprietary</td>
<td>1.28-1.42</td>
<td>1.0</td>
</tr>
</tbody>
</table>

#### CWA (Clean Water Act)

<table>
<thead>
<tr>
<th>Component</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>
<tr>
<td>Proprietary Acid</td>
<td>5000 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>Proprietary Alkaline</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Proprietary Acid</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**EPA Pesticide Registration Number**: EPA Reg. No. 66222-141
**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

Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

**Difference between SDS and EPA pesticide label**

<table>
<thead>
<tr>
<th></th>
<th>EPA</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal Word</td>
<td>Caution</td>
<td>Warning</td>
</tr>
<tr>
<td>Acute toxicity – inhalation</td>
<td>N/A</td>
<td>Harmful if inhaled</td>
</tr>
</tbody>
</table>

**16. OTHER INFORMATION**

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td></td>
<td>See Section 8</td>
</tr>
</tbody>
</table>

**Issue Date:** 02-Jan-2013  
**Revision Date:** 30-Oct-2015  
**Revision Note:** Updated format from 27-Jun-2014

**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*