

MATERIAL SAFETY DATA SHEET

**IMPOSE®**

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**1. IDENTIFICATION**

Product name: **IMPOSE®**  
 Chemical name of active ingredient(s): Ammonium salt of imazapic ( $\pm$ )-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1 H imidazol-2-yl]-5-methyl-3-pyridinecarboxylic acid  
 Manufacturer/Registrant: Makhteshim Agan of North America, Inc.  
 3120 Highwoods Boulevard, Suite 100  
 Raleigh, NC 27604  
 Phone: 1-919-256-9300  
 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**

CHEMICAL NAME	CAS #	%	OSHA/ PEL	ACGIH/ TLV	OTHER	NTP/IARC/OSHA (Carcinogen)
Ammonium salt of imazapic	104098-49-9	23.3	NA	NA	NA	NA
Ammonia solution 25%	1336-21-6	5.4	NA	NA	NA	NA
NA=not available						

**3. HAZARDS IDENTIFICATION**

**PHYSICAL PROPERTIES:**

Appearance: Yellow to green liquid

Odor: Faint odor

**EMERGENCY OVERVIEW: 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.

**PRIMARY ROUTES OF EXPOSURE:** Routes of entry include eye and skin contact, ingestion and inhalation.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon dioxide, carbon monoxide and nitrogen oxides.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** No specific conditions are known which may be aggravated by exposure to this product.

**4. FIRST AID**

FIRST AID	
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For medical emergencies, you may also call Prosar 24 hours a day at 1-877-250-9291.

## 5. FIRE FIGHTING MEASURES

**FLASHPOINT:** >100°C

**FLAMMABLE LIMITS (% in air):** Not Applicable

**AUTOIGNITION TEMPERATURE:** Not Applicable

**FIRE FIGHTING PROCEDURES:** 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. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

**UNUSUAL FIRE, EXPOSURE AND REACTIVITY HAZARDS:** Carbon monoxide, carbon dioxide and nitrogen oxide will be released if product is heated above decomposition temperature. These substances can be released if product is involved in a fire.

**SUITABLE EXTINGUISHING MEDIA:** Use water spray, dry chemical, carbon dioxide, or foam.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, carbon dioxide and nitrogen oxides.

## 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Wear suitable protective clothing.

**ENVIRONMENTAL PRECAUTIONS:** Do not discharge into drains or the environment.

**ACTION TO TAKE FOR SPILLS/LEAKS:** Control the spill at its source. Contain the spill to prevent it from spreading, contaminating soil, or entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

## 7. HANDLING AND STORAGE

**PRECAUTIONS TO BE TAKEN IN STORAGE:** Do not contaminate water, food or feed by storage or disposal. KEEP FROM FREEZING. Do not store below 20°F (-6.67°C) or above 104°F (40°C). Keep only in original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination.

**PRECAUTIONS TO BE TAKEN IN HANDLING:** Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

**STORAGE TEMPERATURE (MIN/MAX):**

**Minimum:** 20°F (-6.67°C)

**Maximum:** 104°F (40°C)

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THE PRODUCT. FOR COMMERCIAL APPLICATION AND ON-FARM APPLICATIONS, CONSULT THE PRODUCT LABEL.**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

**ADDITIONAL PROTECTIVE MEASURES:** 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/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**USER SAFETY RECOMMENDATIONS:**

- Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Wash the outside of gloves then remove after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

**EXPOSURE GUIDELINES:** Refer to Section 2.

**ENGINEERING CONTROLS:** Refer to product label.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE:** Yellow to green liquid

**ODOR:** Faint odor

**pH:** 6.65

**DENSITY:** 1.101 g/ml

**VISCOSITY(Centistokes):** 3.751 @ 20°C; 2.130 @ 40°C

**FLAMMABILITY(°C):** > 100°C

**10. STABILITY AND REACTIVITY**

**STABILITY:** Stable under normal use and storage conditions.

**INCOMPATIBLE MATERIALS:** Not known.

**HAZARDOUS DECOMPOSITION:** Carbon monoxide, carbon dioxide and nitrogen oxides if heated above decomposition temperatures.

**HAZARDOUS POLYMERIZATION:** Material is not known to polymerize

**CONDITIONS TO AVOID:** Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme temperatures. Avoid prolonged exposure to extreme heat. Avoid contamination. Avoid electrostatic discharge. Avoid prolonged storage.

**11. TOXICOLOGICAL INFORMATION**

**ACUTE TOXICITY/IRRITATION STUDIES:**

Acute Oral LD<sub>50</sub> (Rat): > 5,000 mg/kg

Acute Dermal LD<sub>50</sub> (Rabbit): > 5,000 mg/kg

Acute Inhalation LC<sub>50</sub> (Rat): 2.38 mg/L (4 hours)

Eye Irritation (Rabbit): Non-irritating

Skin Irritation (Rabbit): Non-irritating

Dermal Sensitization: Not a contact sensitizer

**12. ECOLOGICAL INFORMATION**

**ENVIRONMENTAL HAZARDS:** 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.

**13. DISPOSAL CONSIDERATIONS**

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Dispose of product containers, waste containers, and residues according to label instructions and local, state, and federal health and environmental regulations.

**14. TRANSPORT INFORMATION**

**DOT CLASSIFICATION:** Not regulated

**INTERNATIONAL TRANSPORTATION:**

**IMO (vessel):** UN3082, Environmentally hazardous substances, liquid, N.O.S. (Imazapic), 9, PGIII, Marine Pollutant

**IATA (air):** UN3082, Environmentally hazardous substances, liquid, N.O.S. (Imazapic), 9, PGIII, Marine Pollutant

**15. REGULATORY INFORMATION**

**SARA TITLE III CLASSIFICATION:**

**Section 302/304:** Not applicable

**Section 311/312:** Acute Health Hazard (immediate)

**Section 313 chemical(s):** Ammonia solution 25% (5.4%) CAS#:1336-21-6

**CA PROPOSITION 65:** Not applicable.

**CERCLA REPORTABLE QUANTITY (RQ):** Not Applicable

**RCRA CLASSIFICATION:** 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.

**TSCA STATUS:** The ingredients of this product are listed on the TSCA inventory or are exempt.

**16. OTHER INFORMATION**

**HAZARD RATINGS:**

	<b>NFPA</b>	
<b>HEALTH:</b>	2	0 LEAST
<b>FLAMMABILITY:</b>	1	1 SLIGHT
<b>REACTIVITY:</b>	0	2 MODERATE
		3 HIGH
		4 SEVERE

**MSDS DATE:** 1-2-13. Supersedes versions dated 12-12-12, 4-23-08 and 5-16-07.

The information contained herein is given in good faith and is believed to be correct, but no warrant, express or implied, is made. Consult Makhteshim Agan of North America, Inc. for further information.