

MATERIAL SAFETY DATA SHEET

Alias® 2F

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1. IDENTIFICATION

Product name: **Alias® 2F**
 Chemical name of active ingredient(s): Imidacloprid: 1-[(6-chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine
 Manufacturer/Registrant: Makhteshim Agan of North America, Inc.
 4515 Falls of Neuse Road, Suite 300
 Raleigh, NC 27609
 Phone: 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

COMMON NAME	CAS NO.	%	OSHA PEL	ACIGH TLV	NTP/IARC/OSHA (Carcinogen)
Imidacloprid	138261-41-3	21.4	NE	NE	NA

NE= Non established

NA= Not applicable

3. HAZARDS IDENTIFICATIONS

PHYSICAL PROPERTIES:

Appearance: Off-white viscous liquid suspension

Odor: Mild

EMERGENCY OVERVIEW: CAUTION. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing.

LIKELY ROUTES OF EXPOSURE: Inhalation, skin contact and skin absorption.

SYMPTOMS OF ACUTE EXPOSURE: This material may cause eye irritation. Eye injury may persist for several days. Harmful if absorbed through skin. This material does not cause skin irritation and is not a sensitizer. Harmful if swallowed or inhaled.

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

HAZARDOUS DECOMPOSITION PRODUCTS: May give off poisonous fumes including hydrogen chloride (HCl), hydrogen cyanide (hydrocyanic acid), carbon dioxide (CO₂), carbon monoxide (CO), nitrogen oxides (NO_x).

4. FIRST AID MEASURES

FIRST AID	
IF SWALLOWED:	<ul style="list-style-type: none"> Immediately call a poison control center or doctor. Have person sip a glass of water if able to swallow. Do not induce vomiting unless directed to do so by a physician or poison control center. Do not give anything by mouth to an unconscious or convulsing person.
IF IN EYES:	<ul style="list-style-type: none"> 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:	<ul style="list-style-type: none"> Take off contaminated clothing and shoes immediately. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact PROSAR at 1-887-250-9291 for emergency medical treatment information.

Note to Physicians: No specific antidote. Treat symptomatically.

5. FIRE FIGHTING MEASURES

FLASHPOINT: >93°C (>200° F)

FLAMMABLE LIMITS (% in air): Not available

AUTOIGNITION TEMPERATURE: Not available

EXTINGUISHING MEDIA: Use water spray, alcohol-resistant foam, carbon dioxide (CO₂), dry chemical.

FIRE-FIGHTING PROCEDURES: Keep out of smoke. Fight fire from upwind position. Cool closed containers/tanks exposed to fire with water spray. Do not allow run-off fire fighting to enter drains or water courses.

HAZARDOUS DECOMPOSITION PRODUCTS: May give off poisonous fumes including hydrogen chloride (HCl), hydrogen cyanide (hydrocyanic acid), carbon dioxide (CO₂), carbon monoxide (CO), nitrogen oxides (NO_x).

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.

ACTION TO TAKE FOR SPILLS: If the container is leaking, invert to prevent leakage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below.

ADDITIONAL INFORMATION: Contaminated soil may have to be removed and disposed. Contact Bayer for further assistance if necessary. Information regarding personal protective equipment, see Section 8.

FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK OR FIRE), CALL INFOTRAC AT (800) 535-5053.

7. HANDLING AND STORAGE

Do not contaminate water, food or feed by storage or disposal.

PRECAUTIONS TO BE TAKEN IN HANDLING: Handle and open container in a manner as to prevent spillage. Read label carefully before use. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove personal protective equipment (PPE) after handling this product.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

STORAGE TEMPERATURE (MIN/MAX):

Minimum: Normal ambient storage temperatures.

Maximum: 30-day storage temperature average must not exceed 38°C (100°F).

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.

ENGINEERING CONTROLS: Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

EYE PROTECTION: Use splash-proof goggles.

HAND PROTECTION: Wear chemical resistant gloves made of waterproof material such as polyethylene or polyvinyl chloride.

BODY PROTECTION: Wear long-sleeved shirt, long pants and shoes plus socks.

RESPIRATOR PROTECTION: No personal respiratory protective equipment is normally required. When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

EXPOSURE GUIDELINES:

Glycerine (CAS# 56-81-5): ACGIH TWA (mist): 10 mg/m³
OSHA PEL (respirable fraction): 5 mg/m³
OSHA PEL (total dust): 15 mg/m³
OSHA TWA (respirable fraction): 5 mg/m³
OSHA TWA (total dust): 10 mg/m³

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Off-white viscous liquid suspension

ODOR: Mild

pH: 7.5

SPECIFIC GRAVITY: 1.12 @ 20° C

MELTING/FREEZING POINT: -6.7° C (19.9° F)

SOLUBILITY IN WATER: Dispersible

VISCOSITY: 350-500 mPa.s @ 25° C

10. STABILITY AND REACTIVITY

STABILITY: This product is stable under normal conditions.

CONDITIONS TO AVOID: None known.

MATERIALS TO AVOID: None known.

HAZARDOUS REACTIONS: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: May give off poisonous fumes including hydrogen chloride (HCl), hydrogen cyanide (hydrocyanic acid), carbon dioxide (CO₂), carbon monoxide (CO), nitrogen oxides (NO_x).

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES:

Acute Oral LD₅₀ (Rat): >4,870 mg/kg (male); 4,143 mg/kg (female)

Acute Dermal LD₅₀ (Rabbit): >2,000 mg/kg (male and female)

Acute Inhalation LC₅₀ (Rat): >5.33 mg/L air (4-hours; male and female); >20 mg/l (1-hour; male and female; extrapolated from the 4-hr LC₅₀)

Eye Irritation (Rabbit): Minimally eye irritation

Dermal Irritation (Rabbit): No skin irritation.

Dermal Sensitization (Guinea pig): Not a skin sensitizer.

CHRONIC TOXICITY:

Imidacloprid caused thyroid and/or liver effects in chronic dietary studies in rats and dogs.

CARCINOGENICITY:

Imidacloprid was not considered carcinogenic in rats and mice.

REPRODUCTIVE TOXICITY:

Imidacloprid was not a reproductive toxicant in a multi-generation study in rats.

DEVELOPMENTAL TOXICITY:

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Imidacloprid is not considered a primary developmental toxicant in rats and rabbits. Developmental effects were observed at doses that caused maternal toxicity.

NEUROTOXICITY:

Imidacloprid showed slight behavioral and activity changes only at the highest dose tested in neurotoxicity studies in rats. There were no correlating morphological changes observed in the neural tissues.

MUTAGENICITY:

Imidacloprid was not mutagenic or genotoxic on the overall weight of evidence in a battery of in vitro and in vivo tests.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: Do not apply directly to water, areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. This product is toxic to wildlife and highly toxic to aquatic invertebrates.

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): Not regulated

IATA (air): Not regulated

15. REGULATORY INFORMATION

SARA TITLE III CLASSIFICATION:

Section 302: Not applicable
Section 311/312: Acute health hazard (immediate)
Section 313: Not applicable

CA PROPOSITION 65: Not applicable

CERCLA 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

NFPA HAZARD RATINGS			0 MINIMAL
HEALTH:	1		1 SLIGHT
FLAMMABILITY:	1		2 MODERATE
REACTIVITY:	1		3 HIGH
			4 SEVERE

MSDS DATE: 3-11-10. Supersedes version dated 6-23-05. Changes made to all sections.

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