

MATERIAL SAFETY DATA SHEET

**Adapt™**

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**1. IDENTIFICATION**

Product name: **Adapt™**  
 Chemical name of active ingredient: Nicosulfuron: 2-[[ (4,6-dimethoxy-pyrimidin-2-yl)amino-carbonyl]amino-sulfonyl]-N,N-dimethyl-3-pyridinecarboxamide  
 Manufacturer: Makhteshim Agan of North America, Inc.  
 4515 Falls of Neuse Road, Suite 300  
 Raleigh, NC 27609  
 Phone: 919-256-9300  
 Phone: 1-800-535-5053  
 For fire, spill, and/or leak emergencies, contact Infotrac: Phone: 1-877-250-9291  
 For medical emergencies and health and safety inquiries, contact Prozar:

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

COMMON NAME	CAS NO.	%	OSHA PEL	ACGIH TLV	OTHER	NTP/IARC/OSHA (Carcinogen)
Nicosulfuron	111991-09-4	75	NE	NE	NA	NA
NA=Not available NE=Not established						

**3. HAZARDS IDENTIFICATIONS**

**PHYSICAL PROPERTIES**

Appearance: Ecru-tan beige granule  
 Odor: No odor

**EMERGENCY OVERVIEW:** CAUTION. Causes moderate eye irritation. Harmful if absorbed through the skin. Avoid contact with skin, eyes, and clothing.

**PRIMARY ROUTES OF EXPOSURE:** Eye and skin contact and inhalation.

**4. FIRST AID MEASURES**

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 15-20 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 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 15-20 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>
<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>
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact Prozar at 1-877-250-9291 for emergency medical treatment information.	

**5. FIRE FIGHTING MEASURES**

**FLASH POINT:** Not applicable

**FLAMMABLE LIMITS:** LFL/UFL: Not applicable

**EXTINGUISHING MEDIA:** Water, foam, CO<sub>2</sub>, dry chemical.

**SPECIAL FIRE-FIGHTING PROCEDURES:** Evacuate personnel to a safe area. Wear self-contained breathing apparatus. Wear full protective equipment. Use water spray. Runoff from fire control may be a pollution hazard. Control runoff.

## 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Wear suitable protective clothing, gloves and eye/face protection during cleanup.

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

**AFTER SPILLAGE AND/OR LEAKAGE:** Collect spills and put it into appropriated container. Dispose of this material and its container according to Section 13.

## 7. HANDLING AND STORAGE

**PRECAUTIONS TO BE TAKEN IN HANDLING:** Avoid contact with eyes, skin or clothing. Wash thoroughly after handling. Wash clothing after use. Avoid breathing dust. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

**PRECAUTIONS TO BE TAKEN IN STORAGE:** Store product in original container only.

**STORAGE TEMPERATURE (MIN/MAX):** Normal ambient temperatures.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.**

**FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.**

**EYE PROTECTION:** Safety goggles with side shields or goggles

**SKIN PROTECTION:** Long sleeved shirt, long pants, shoes plus socks.

**HAND PROTECTION:** Chemical-resistant gloves (such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber), all =14 mils.

**RESPIRATOR REQUIREMENTS:** When needed, based on the conditions of use, wear a NIOSH-approved respirator with purifying cartridge.

**ADDITIONAL PROTECTIVE MEASURES:** Discard clothing and other materials that have been heavily contaminated with this product. 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.

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

**ENGINEERING CONTROLS:** Minimize airborne concentrations.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**APPARANCE:** Ecru-tan beige granule

**ODOR:** No odor

**pH:** 4.079±0.017

**BULK DENSITY:** 0.55±0.0036 g/mL

## 10. STABILITY AND REACTIVITY

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

**MATERIALS TO AVOID:** None known.

**HAZARDOUS POLYMERIZATION:** Not applicable.

**INSTABILITY CONDITIONS:** None known.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY/IRRITATION STUDIES (Based on Nicosulfuron technical)

Acute Oral LD<sub>50</sub> (Rat): > 5,000 mg/kg  
Acute Dermal LD<sub>50</sub> (Rat): > 2,000 mg/kg  
Acute Inhalation LC50 (Rat): > 5.9 mg/L (4 hr.)  
Eye Irritation: Moderately irritating  
Skin Irritation: Not irritating  
Dermal Sensitization: Not a skin sensitizer.

### 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL HAZARDS:** 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 rinsewater. Do not apply where/when conditions could favor runoff.

#### Ecotoxicological Information: (Based on Nicosulfuron technical)

##### Aquatic Toxicity:

96 H-LC50 - Bluegill sunfish [mg/L]: >1,000  
96 H-LC50 - Rainbow trout [mg/L]: >1,000  
48 H-EC50 - Daphnia magna [mg/L]: >1,000

##### Avian Toxicity:

Acute Oral LD50 (Bobwhite quail): > 2,250 mg/kg  
Dietary LC50 (Bobwhite quail & Mallard duck): > 5,620 ppm  
Bees LC50: Contact > 20 µg/bee, Oral > 1000 ppm

### 13. DISPOSAL CONSIDERATIONS

**END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.**

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must 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

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<b>HAZARD RATINGS</b>	<b>NFPA</b>	<b>HMIS</b>	
<b>HEALTH:</b>	1	1	0 MINIMAL
<b>FLAMMABILITY:</b>	1	1	1 SLIGHT
<b>REACTIVITY:</b>	0	0	2 MODERATE
			3 HIGH
			4 SEVERE

**MSDS DATE:** 9-11-09

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.