1. PRODUCT IDENTIFICATION

Product Name: BICEP II MAGNUM
EPA Signal Word: Caution

Product No.: A9560A

2. HAZARDS IDENTIFICATION

Health and Environmental
Harmful if inhaled. May be harmful if swallowed or in contact with skin. Causes mild eye and skin irritation.

Physical Properties
Appearance: White fluid paste
Odor: Latex paint

Unusual Fire, Explosion and Reactivity Hazards
During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Material</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other</th>
<th>NTP/IARC/OSHA Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol (&lt; 10%)</td>
<td>Not Established</td>
<td>100 mg/m³ (ceiling) [aerosol]</td>
<td>Not Established</td>
<td>No</td>
</tr>
<tr>
<td>Benoxacor (&lt; 5%)</td>
<td>Not Established</td>
<td>Not Established</td>
<td>1 mg/m³ TWA **</td>
<td>No</td>
</tr>
<tr>
<td>Atrazine (33.0%)</td>
<td>Not Established</td>
<td>Not Established</td>
<td>5 mg/m³ TWA **</td>
<td>IARC Group 3</td>
</tr>
<tr>
<td>s-Metolachlor (26.1%)</td>
<td>Not Established</td>
<td>Not Established</td>
<td>10 mg/m³ TWA ***</td>
<td>No</td>
</tr>
</tbody>
</table>

** recommended by NIOSH
*** Syngenta Occupational Exposure Limit (OEL)

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

Syngenta Hazard Category: B
4. FIRST AID MEASURES

Have the product container, label or Material Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison control center or doctor, or going for treatment.

Ingestion: If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Eye Contact: If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Skin Contact: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Inhalation: If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

Notes to Physician

Medical Condition Likely to be Aggravated by Exposure

None known.

5. FIRE FIGHTING MEASURES

Fire and Explosion

Flash Point (Test Method): > 212°F (Abel-Pensky CC)
Flammable Limits (% in Air): Lower: Not Applicable Upper: Not Applicable
Autoignition Temperature: Not Available
Flammability: Not Applicable

Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

In Case of Fire

Use dry chemical, foam or CO2 extinguishing media. 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.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from 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

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. 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.

Product Name: BICEP II MAGNUM
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

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

Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact: Where eye contact is likely, use chemical splash goggles.

Skin Contact: Where contact is likely, wear chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride [PVC] or Viton), coveralls, socks and chemical-resistant footwear.

Inhalation: A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits.

In case of emergency spills, use a NIOSH approved respirator with any N, R, P or HE filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White fluid paste</td>
</tr>
<tr>
<td>Odor</td>
<td>Latex paint</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>216 °F</td>
</tr>
<tr>
<td>Specific Gravity/Density</td>
<td>1.1082 g/cm³ @ 77°F (25°C)</td>
</tr>
<tr>
<td>pH</td>
<td>6.9 (1% solution in H2O @ 77°F (25°C))</td>
</tr>
<tr>
<td>Solubility in H2O</td>
<td></td>
</tr>
<tr>
<td>Atrazine</td>
<td>33 mg/l @ 68°F (20°C)</td>
</tr>
<tr>
<td>s-Metolachlor</td>
<td>0.48 g/l @ 77°F (25°C)</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td></td>
</tr>
<tr>
<td>Atrazine</td>
<td>2.9 x 10(-7) mmHg @ 68°F (20°C)</td>
</tr>
<tr>
<td>s-Metolachlor</td>
<td>2.8 x 10(-5) mmHg @ 77°F (25°C)</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>Stable under normal use and storage conditions.</td>
</tr>
<tr>
<td>Hazardous Polymerization</td>
<td>Will not occur.</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>None known.</td>
</tr>
<tr>
<td>Materials to Avoid</td>
<td>None known.</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>None known.</td>
</tr>
</tbody>
</table>

11. TOXICOLOGICAL INFORMATION

**Acute Toxicity/Irritation Studies (Finished Product)**

<table>
<thead>
<tr>
<th>Route</th>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion: Oral (LD50 Rabbit)</td>
<td></td>
<td>3271 mg/kg body weight</td>
</tr>
<tr>
<td>Dermal: Dermal (LD50 Rat)</td>
<td></td>
<td>&gt; 2020 mg/kg body weight</td>
</tr>
<tr>
<td>Inhalation: Inhalation (LC50 Rat)</td>
<td></td>
<td>&gt; 1.6 mg/l air - 4 hours</td>
</tr>
<tr>
<td>Eye Contact: Mildly Irritating (Rabbit)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin Contact: Slightly Irritating (Rabbit)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin Sensitization: Not a Sensitizer (Guinea Pig)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Product Name: BICEP II MAGNUM
12. ECOLOGICAL INFORMATION

Ecotoxicity Effects

Atrazine:
- Fish (Rainbow Trout) 96-hour LC50 4.5 ppm
- Green Algae 5-day EC50 49 ppb
- Invertebrate (Water Flea) Daphnia Magna 48-hour EC50 6.9 ppm
- Bird (Bobwhite Quail) 12-day LD50 940 mg/kg

s-Metolachlor:
- Fish (Rainbow Trout) 96-hour LC50 11.9 ppm
- Green Algae 5-day EC50 0.008 ppm
- Bird (Bobwhite Quail) LD50 Oral > 2510 mg/kg
- Invertebrate (Water Flea) 48-hour EC50 26 ppm

Environmental Fate

Atrazine:
- The information presented here is for the active ingredient, atrazine.
s-Metolachlor:
The information presented here is for the active ingredient, s-metolachlor.

### 13. DISPOSAL CONSIDERATIONS

**Disposal**
Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable
Listed Waste: Not Applicable

### 14. TRANSPORT INFORMATION

**DOT Classification**
- Ground Transport - NAFTA
- Road Transport - Not regulated.

Rail Car Shipments
- Proper Shipping Name: RQ Other Regulated Substances, Liquid, N.O.S. (Ethylene Glycol)
- Hazard Class or Division: Class 9
- Identification Number: NA 3082
- Packing Group: PG III
- RQ Ethylene Glycol = 5000 lbs

**Comments**
- Water Transport - International
  - < 13,500 gal.
  - Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (s-Metolachlor, Atrazine), Marine Pollutant
  - Hazard Class or Division: Class 9
  - Identification Number: UN 3082
  - Packing Group: PG III

Air Transport - International
- Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (s-Metolachlor, Atrazine)
- Hazard Class or Division: Class 9
- Identification Number: UN 3082
- Packing Group: PG III

Note: This product is currently not regulated for airfreight within the NAFTA region. However, effective 01/01/2011 the above classification must be used.

### 15. REGULATORY INFORMATION

**EPCRA SARA Title III Classification**
- Section 311/312 Hazard Classes: Acute Health Hazard
- Section 313 Toxic Chemicals:
  - Atrazine (33.0%) (CAS No. 1912-24-9)
  - Ethylene Glycol (< 10%) (CAS No. 107-21-1)

**California Proposition 65**
Not Applicable

**CERCLA/SARA 302 Reportable Quantity (RQ)**

Product Name: BICEP II MAGNUM
Page: 5
Report product spills > 13,500 gal. (based on ethylene glycol [RQ = 5,000 lbs.] content in the formulation)

**RCRA Hazardous Waste Classification (40 CFR 261)**
- Not Applicable

**TSCA Status**
- Exempt from TSCA, subject to FIFRA

### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA Hazard Ratings</th>
<th>HMIS Hazard Ratings</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health:</td>
<td>2</td>
<td>0 Minimal</td>
</tr>
<tr>
<td>Flammability:</td>
<td>1</td>
<td>1 Slight</td>
</tr>
<tr>
<td>Instability:</td>
<td>0</td>
<td>2 Moderate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health:</th>
<th>Flammability:</th>
<th>Reactivity:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td>2</td>
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<tr>
<td>3</td>
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</tr>
<tr>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Reactivity: 0 Minimal, 1 Slight, 2 Moderate, 3 Serious, 4 Extreme

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 6/10/1996
Revision Date: 8/11/2010
Replaces: 3/1/2010

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

End of MSDS