1. IDENTIFICATION

Product Identifier
Product Name

Bumper 432 EC

Other means of identification
SDS #
ADAMA-229

Registration Number(s)
Pest Control Product Reg. No. 28017
UN/ID No
UN3082

Recommended use of the chemical and restrictions on use
Recommended Use
Fungicide.

Details of the supplier of the safety data sheet
Manufacturer Address
ADAMA Agricultural Solutions Canada Ltd.
300 – 191 Lombard Avenue
Winnipeg, Manitoba R3B 0X1
1-855-264-6262

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 ProPharma Group:
1-877-250-9291

2. HAZARDS IDENTIFICATION

This chemical is a product registered by the Canadian Pest Control Products Act 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-PCPA registered chemicals. Please see Section 15 for additional information. This product has been classified according to Canada’s Hazardous Product Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

Appearance
Clear, brownish liquid

Physical state
Liquid

Odor
Aromatic

Classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2B</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

Signal Word
Warning

Hazard statements
May cause an allergic skin reaction
Causes skin irritation
Causes eye irritation
Precautionary Statements - Prevention
Avoid breathing dust/fume/gas/mist/vapors/spray
Wear protective gloves/eye protection/face protection
Wash face, hands and any exposed skin thoroughly after handling
Contaminated work clothing must not be allowed out of the workplace

Precautionary Statements - Response
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
IF ON SKIN: Wash with plenty of water and soap
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other hazards
Very 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>Propiconazole [1-[2-(2,4-Dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]-methyl-1H-1,2,4-triazole]</td>
<td>60207-90-1</td>
<td>41.8</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
Take the container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

Eye Contact
Hold eye open and rinse slowly and gently with water for 15 to 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.

Skin Contact
Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

Inhalation
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 a poison control center or doctor for further treatment advice.

Ingestion
Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects
Symptoms

Skin redness and tears.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

There is no specific antidote for this product. Apply symptomatic therapy.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray, fog or regular foam.

Unsuitable Extinguishing Media

Not determined.

Specific Hazards Arising from the Chemical

Not determined.

Hazardous Combustion Products

NOx, CO, CO2 and chlorides.

Protective equipment and precautions for firefighters

Wear suitable protective clothing. Self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Use personal protective equipment as required.

Environmental precautions

Environmental precautions

If the product has contaminated surface water, inform the appropriate authorities. Contaminated soil layers have to be dug out. See Section 12 for additional Ecological Information.

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

In the event of minor spillage: Absorb in sand or other inert material. Use appropriate containment to avoid environmental contamination. In the event of major spillage: Collect and contain as much free liquid as possible. Dike spills using absorbent or impervious materials such as sand or clay for later disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling

Keep out of the reach of children. Do not eat, drink or smoke during work; wash hands and face thoroughly before doing so. Immediately wash off accidental splashes of the concentrate or spray mixture from skin, clothing and out of eyes. After work, change clothing and wash entire body thoroughly. Wash contaminated working clothes separately from laundry before use. Do not contaminate food or feed.

Conditions for safe storage, including any incompatibilities

Storage Conditions

To prevent contamination, store this product away from food or feed.

Incompatible Materials

Strong acids. Strong bases.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering Controls
Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/ Face Protection
Wear protective goggles or face shield when handling the concentrated product.

Skin and Body Protection
Long pants, long-sleeved shirt, socks, chemical-resistant footwear and overalls when mixing, handling the product and during equipment cleanup and repairs. The wearing of neoprene gloves by pilots when entering the aircraft is essential.

Respiratory Protection
In areas with inadequate ventilation a NIOSH-approved chemical cartridge respirator with organic vapor cartridges and pesticide pre-cartridges or a self-contained breathing apparatus may be required when working with this product.

General Hygiene Considerations
Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear, brownish liquid</td>
<td>Odor Aromatic</td>
</tr>
<tr>
<td>Color</td>
<td>Brownish</td>
<td>Odor Threshold Not determined</td>
</tr>
<tr>
<td>pH</td>
<td>4-5</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
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<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>110°C/230°F</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Liquid-Not applicable</td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
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<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not determined</td>
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</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not determined</td>
<td></td>
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<tr>
<td>Relative Density</td>
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<tr>
<td>Water Solubility</td>
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<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
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<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
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<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
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<tr>
<td>Kinematic Viscosity</td>
<td>Not determined</td>
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<tr>
<td>Dynamic Viscosity</td>
<td>94.3 mPa(s)</td>
<td></td>
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<td>Explosive Properties</td>
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<tr>
<td>Oxidizing Properties</td>
<td>Not determined</td>
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<tr>
<td>Other Information</td>
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</tr>
<tr>
<td>Density</td>
<td>1.062 g/mL</td>
<td></td>
</tr>
</tbody>
</table>

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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
Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to Avoid
Protect from sunlight, open flame and sources of heat. Decomposes upon heating.

Incompatible Materials
Strong acids. Strong bases.

Hazardous Decomposition Products
NOx, CO, CO2 and chlorides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact
Causes eye irritation.

Skin Contact
Causes skin irritation.

Inhalation
Harmful if inhaled.

Ingestion
Harmful if swallowed.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propiconazole [1-(2,4-Dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]-methyl-1H-1,2,4-triazole] 60207-90-1</td>
<td>= 1517 mg/kg (Rat)</td>
<td>&gt; 4 g/kg (Rat)</td>
<td>= 1264 mg/m^3 (Rat) 4 h</td>
</tr>
</tbody>
</table>

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

Sensitization
May cause an allergic skin reaction.

Carcinogenicity
Based on the information provided, this product does not meet the definition of a carcinogen.
Numerical measures of toxicity
Acute Oral LD50 (Rat): >2,000 mg/kg
Acute Dermal LD50 (Rabbit): >5,000 mg/kg
Acute Inhalation LC50 (Rat): >5 mg/L
Eye Irritation: Irritating
Dermal Irritation: Irritating
Dermal Sensitization: A skin sensitizer

12. ECOLOGICAL INFORMATION

Ecotoxicity
Very toxic to aquatic life with long lasting effects.

Persistence/Degradability
Not determined.

Bioaccumulation
Not determined.

Mobility
Not determined

Other Adverse Effects
Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes
For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for cleanup of spills.

Contaminated Packaging
Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

14. TRANSPORT INFORMATION

DOT
In containers of 119 gallons capacity or less this product is not regulated by DOT For containers greater than 119 gallons:

UN/ID No
UN3082

Proper Shipping Name
Environmentally hazardous substances, liquid, n.o.s. (Propiconazole)

Hazard Class
9

Packing Group
III

Marine Pollutant
Yes.

IATA

UN/ID No
UN3082

Proper Shipping Name
Environmentally hazardous substances, liquid, n.o.s. (Propiconazole)

Hazard Class
9

Packing Group
III

Marine Pollutant
Yes.
15. REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL/NDSL</th>
<th>EINECS/E LINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propiconazole [1-[2-(2,4-Dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]-methyl-1H-1,2,4-triazole]</td>
<td>X</td>
<td>X</td>
<td>Present</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend:
- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/E LINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 311/312 Hazard Categories
- Acute Health Hazard: Yes
- Chronic Health Hazard: Yes
- Fire Hazard: No
- Sudden Release of Pressure Hazard: No
- Reactive Hazard: No

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

<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>Propiconazole [1-[2-(2,4-Dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]-methyl-1H-1,2,4-triazole] - 60207-90-1</td>
<td>60207-90-1</td>
<td>41.8</td>
<td>1.0</td>
</tr>
</tbody>
</table>

US State Regulations

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>Propiconazole [1-[2-(2,4-Dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]-methyl-1H-1,2,4-triazole] - 60207-90-1</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pesticide Registration Number
- Pest Control Product Reg. No. 28017
Pest Control Product Statement
This chemical is a product registered by the Canadian Pest Control Products Act 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-PCPA registered chemicals.

Product Label
CAUTION
POISON
EYE IRRITANT

Difference between SDS and product label

<table>
<thead>
<tr>
<th>Signal Word</th>
<th>Product label</th>
<th>SDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
<td>Harmful if swallowed</td>
<td>NA</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>NA</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Eye irritant</td>
<td>Causes eye irritation</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>NA</td>
<td>May cause an allergic skin reaction</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>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</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>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

Revision Date: 10-Aug-2017
Revision Note: Updated address

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