



Safety Data Sheet

Issue Date: 04-Jun-2012

Revision Date: 17-Sept-2015

Version 2

1. IDENTIFICATION

Product Identifier

Product Name

BUMPER ES

Other means of identification

SDS #

ADAMA-050

Registration Number(s)

EPA Reg. No. 66222-241

Recommended use of the chemical and restrictions on use

Recommended Use

EPA registered pesticide.

Details of the supplier of the safety data sheet

Manufacturer Address

Makhteshim Agan of North America, Inc. (d/b/a ADAMA)
3120 Highwoods Blvd., Suite 100
Raleigh, NC 27604
1-919-256-9300

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 PROSAR:
1-877-250-9291

2. HAZARDS IDENTIFICATION

This chemical is a product registered by the Environmental Protection Agency 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-EPA registered chemicals. Please see Section 15 for additional EPA information.

Appearance Light yellow liquid

Physical State Liquid

Odor Mild surfactant

Classification

Acute toxicity – Inhalation (Dusts/Mists)	Category 4
Acute toxicity - Oral	Category 4
Skin sensitization	Category 1

Hazards Not Otherwise Classified (HNOC)

Causes mild skin irritation

Signal Word

Warning

Hazard Statements

Harmful if inhaled
Harmful if swallowed
May cause an allergic skin reaction



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Wear protective gloves

Precautionary Statements - Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing
 Call a poison center/doctor if you feel unwell
 IF ON SKIN: Wash with plenty of soap and water
 If skin irritation or rash occurs: Get medical advice/attention
 Wash contaminated clothing before reuse
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Rinse mouth

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

Chemical Name	CAS No	Weight-%
Propiconazole [1-[2-(2,4-Dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]-methyl-1H-1,2,4,-triazole]	60207-90-1	40.85
Proprietary solvent	Proprietary	<4

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	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment. If exposed or concerned: Get medical advice/attention.
Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison control center or doctor for treatment advice.
Skin Contact	IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Inhalation	Give oxygen if breathing is difficult. If breathing has stopped, call 911, give artificial respiration. Call a poison control center or doctor for further treatment advice.
Ingestion	Immediately call a poison center or doctor/physician. Do not induce vomiting, unless directed by medical personnel. Never give anything by mouth to an unconscious person.

Most important symptoms and effects

Symptoms Harmful if swallowed. Mild eye, skin, and/or respiratory irritation. May cause an allergic skin reaction.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically. If ingested, induce emesis or lavage stomach. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Water spray, fog or regular foam.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

This product is non-combustible, but it decomposes when heated to high temperatures.

Hazardous Combustion Products Nitrogen oxides (NO_x). Carbon monoxide. Carbon dioxide (CO₂). Chlorides.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate area of unprotected personnel. Remain upwind of fire to avoid hazardous vapors and decomposition products. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal Precautions Wear protective clothing as described in Section 8 of this safety data sheet. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

Environmental Precautions Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

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 Reclaim where possible. Vacuum or sweep up material and place in a disposal container. Wash area with soap and water. Pick up wash liquid with inert absorbent and place in a chemical waste container for disposal.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Wash face, hands, and any exposed skin thoroughly after handling. Wash contaminated clothing before reuse. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid spilling. Avoid breathing dust/fume/gas/mist/vapors/spray. Keep away from open flames, hot surfaces and sources of ignition.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep out of the reach of children. Keep/store only in original container. Do not contaminate water, food or feed by storage, disposal or by cleaning equipment. Store at ambient conditions. Protect from sunlight.
Incompatible Materials	Incompatible with strong acids and bases. Oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines The following information is given as general guidance

Appropriate engineering controls

Engineering Controls Please refer to the product label. Use only with adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Wear safety glasses with side shields (or goggles). Goggles are recommended.
Skin and Body Protection	Wear appropriate clothing to prevent repeated or prolonged skin contact. Wear long-sleeved shirt, long pants, and shoes plus socks. Use chemical resistant gloves, such as P.V.C., butyl-rubber, nitrile-rubber, or neoprene.
Respiratory Protection	NIOSH-approved respirator or mask in the absence of adequate ventilation.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Take off all contaminated clothing and wash it before reuse. 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 and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Contaminated work clothing should not be allowed out of the workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical State	Liquid	Odor	Mild surfactant
Appearance	Light yellow liquid	Odor Threshold	Not determined
Color	Light yellow	Remarks • Method	
Property	Values		
pH	4.71		
Melting Point/Freezing Point	Not determined		
Boiling Point/Boiling Range	Not determined		
Flash Point	110 °C / 230 °F		
Evaporation Rate	Not determined		
Flammability (Solid, Gas)	Liquid-not applicable		
Upper Flammability Limits	Not determined		
Lower Flammability Limit	Not determined		
Vapor Pressure	Not determined		
Vapor Density	Not determined		
Specific Gravity	Not determined		
Water Solubility	Not determined		
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		

Auto-ignition Temperature	Not determined
Decomposition Temperature	Not determined
Kinematic Viscosity	Not determined
Dynamic Viscosity	94.3 @ 26°C; 42.2 @ 40°C centipoise
Explosive Properties	Not determined
Oxidizing Properties	Not determined
Density	1.062 g/cc (8.86 lb/gal) @ 26°C; 1.052 g/cc (8.78 lb/gal) @ 40°C

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 Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children. Avoid direct sunlight. Open flames.

Incompatible Materials

Incompatible with strong acids and bases. Oxidizing agents.

Hazardous Decomposition Products

Decomposes to Hazardous Combustion Products. Nitrogen oxides (NOx). Carbon monoxide. Carbon dioxide (CO₂). Chlorides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Avoid contact with eyes.
Skin Contact	Causes mild skin irritation.
Inhalation	Harmful if inhaled.
Ingestion	Harmful if swallowed

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Propiconazole [1-[2-(2,4-Dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]-methyl-1H-1,2,4-triazole] 60207-90-1	= 1517 mg/kg (Rat)	> 4 g/kg (Rat)	= 1264 mg/m ³ (Rat) 4 h
Proprietary solvent	1516 - 2774 mg/kg (Rat)	-	-

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

Carcinogenicity Not classifiable as a human carcinogen.

Product Information (Numerical measures of toxicity)

Acute Oral LD50 (Rat): 2,000 mg/kg

Acute Dermal LD50 (Rabbit): >5,050 mg/kg

Acute Inhalation LC50 (Rat): >2.19 mg/L (4-hr)

Eye Irritation: Mildly irritating.

Dermal Irritation: Slightly irritating.

Dermal Sensitization: Not a skin sensitizer.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Very toxic to aquatic life with long lasting effects. This pesticide is toxic to fish. For terrestrial uses, 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 disposing of equipment wash water or rinsate. Refer to product labeling for use restrictions to protect endangered species.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Proprietary solvent	11.5: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	32 - 37: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 7.5: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 27 - 29.5: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 29.7: 96 h <i>Pimephales promelas</i> mg/L LC50 static 10.0 - 33.0: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static		39: 48 h <i>Daphnia magna</i> mg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Proprietary solvent	3.1

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods****Disposal of Wastes**

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

<u>DOT</u>	Pack size less than 119 Gallons (450 L): Not Regulated Pack size over 119 Gallons (450L): UN 3082, Environmentally hazardous substance, liquid, N.O.S. (Propiconazole), 9, PG III, Marine pollutant
<u>IATA</u>	UN 3082, Environmentally hazardous substance, liquid , N.O.S. (Propiconazole), 9, PGIII
<u>IMDG</u>	UN 3082, Environmentally hazardous substance, liquid, N.O.S. (Propiconazole), 9, PGIII, Marine Pollutant

15. REGULATORY INFORMATION

International Inventories

TSCA

All ingredients are listed or exempt from listing on Chemical Substance Inventory

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

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

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Propiconazole [1-[2-(2,4-Dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]-methyl-1H-1,2,4,-triazole] - 60207-90-1	60207-90-1	39.6-42.1	1.0

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Propiconazole [1-[2-(2,4-Dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]-methyl-1H-1,2,4,-triazole] - 60207-90-1	X		
Proprietary solvent		X	X

EPA Pesticide Registration Number 66222-241**EPA Statement**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

EPA Pesticide Label

Signal Word: Caution

Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating drinking chewing gum using tobacco or using the toilet. Causes moderate eye irritation. Avoid contact with eyes skin or clothing. Avoid breathing spray mist. Remove and wash contaminated clothing before reuse.

Difference between SDS and EPA pesticide label

	EPA	OSHA
Signal Word	Caution	Warning
Acute toxicity – Inhalation	N/A	Harmful if inhaled
Acute toxicity - Oral	Harmful if swallowed	Harmful if swallowed
Acute toxicity - Dermal	N/A	Causes mild skin irritation
Serious eye damage/eye irritation	Causes moderate eye irritation	N/A

16. OTHER INFORMATION**NFPA****Health Hazards**

Not determined

Flammability

Not determined

Instability

Not determined

Special Hazards

Not determined

HMIS**Health Hazards**

Not determined

Flammability

Not determined

Physical Hazards

Not determined

Personal Protection

Not determined

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17-Sept-2015

Revision Note:

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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