



# Safety Data Sheet

Issue Date: 11-Mar-2013

Revision Date: 06-Nov-2015

Version 2

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Skyraider

### Other means of identification

**SDS #** ADAMA-013

**Registration Number(s)** Reg. No. 66222-247

**UN/ID No** UN3352

### 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** Off-white liquid

**Physical State** Liquid

**Odor** Mild

### Classification

Acute toxicity - Oral	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Carcinogenicity	Category 1B

### Signal Word

**Danger**

### Hazard Statements

Toxic if swallowed  
Toxic if inhaled  
May cause cancer



### **Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 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

### **Precautionary Statements - Response**

If exposed or concerned: Get medical advice/attention  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a poison center/doctor  
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
 Rinse mouth

### **Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

### **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-%
Bifenthrin	82657-04-3	22.1
Imidacloprid	138261-41-3	11

\*\*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.

#### **Eye Contact**

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Seek medical advice.

#### **Skin Contact**

Take off contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Call a poison control center or doctor for treatment advice.

#### **Inhalation**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen if breathing is difficult. If breathing has stopped, call 911, give artificial respiration. Seek medical advice.

<b>Ingestion</b>	Do not induce vomiting, unless directed by medical personnel. Get immediate medical attention. If conscious, give 1 glass of water to dilute. Never give anything by mouth to an unconscious person.
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**Most important symptoms and effects**

<b>Symptoms</b>	Causes eye irritation. Large doses may cause incoordination, tremor, salivation, vomiting, diarrhea and irritability to sound and touch. Overexposure may result in tremors, convulsions, decreased activity and piloerection. Contact with skin may occasionally produce skin sensations such as rashes, numbing, burning or tingling. These skin sensations are reversible and usually subside within 12 hours. Persons with pre-existing eye or skin conditions may be more sensitive to glycerin.
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**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	This product is a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and should be avoided.
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**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**Foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical.**Unsuitable Extinguishing Media** Not determined.**Specific Hazards Arising from the Chemical**

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

**Hazardous Combustion Products** Toxic gases may be formed by fire. Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Hydrogen chloride. Hydrogen fluoride.**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**

<b>Personal Precautions</b>	Wear protective clothing as described in Section 8 of this safety data sheet. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.
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<b>Environmental Precautions</b>	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.
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**Methods and material for containment and cleaning up**

<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so. Dike far ahead of spill; use dry sand to contain the flow of material. Transfer spill products into a properly labelled container for disposal.
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<b>Methods for Clean-Up</b>	Keep in suitable, closed containers for disposal.
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## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Advice on Safe Handling**

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing vapors or mists. Use only outdoors or in a well-ventilated area. Open and handle container with care. Do not contaminate water, food or feed by storage, disposal or by cleaning equipment.

### Conditions for safe storage, including any incompatibilities

#### **Storage Conditions**

Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Do not allow product to freeze. Do not store below 40°F (4°C). If crystals are observed, warm material to above 60°F (16°C) by placing container in warm location. Shake or roll periodically to re-dissolve solids. Keep out of reach of children and animals. Store in original container only. Store in cool, dry place and avoid excessive heat. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

#### **Incompatible Materials**

Strong acids, strong bases, strong oxidizing agents.

## 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**

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**

Use splash goggles or face shield when contact may occur.

#### **Skin and Body Protection**

Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Viton or other impervious gloves are required. Long sleeve shirt, trousers, and safety shoes.

#### **Respiratory Protection**

Ensure adequate ventilation, especially in confined areas. Wear an appropriate NIOSH/MSHA approved respirator if ventilation is inadequate.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical State</b> <b>Appearance</b> <b>Color</b>	Liquid Off-white liquid Off-white	<b>Odor</b> <b>Odor Threshold</b>	Mild Not determined
<b>Property</b> <b>pH</b> <b>Melting Point/Freezing Point</b> <b>Boiling Point/Boiling Range</b> <b>Flash Point</b>	<b>Values</b> 7.0-8.5 Not determined Not determined Not flammable	<b>Remarks • Method</b>	

<b>Evaporation Rate</b>	Not determined
<b>Flammability (Solid, Gas)</b>	Liquid-not applicable
<b>Upper Flammability Limits</b>	Not determined
<b>Lower Flammability Limit</b>	Not determined
<b>Vapor Pressure</b>	Not determined
<b>Vapor Density</b>	Not determined
<b>Specific Gravity</b>	1.107 g/cm <sup>3</sup> (9.24 lb/gal)
<b>Water Solubility</b>	Not determined
<b>Solubility in other solvents</b>	Not determined
<b>Partition Coefficient</b>	Not determined
<b>Auto-ignition Temperature</b>	Not determined
<b>Decomposition Temperature</b>	Not determined
<b>Kinematic Viscosity</b>	Not determined
<b>Dynamic Viscosity</b>	Not determined
<b>Explosive Properties</b>	Not determined
<b>Oxidizing Properties</b>	Not determined
<b>Bulk Density</b>	9.18-9.38 lb/gal

## 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.

### Incompatible Materials

Strong acids, strong bases, strong oxidizing agents.

### Hazardous Decomposition Products

Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Hydrogen chloride. Hydrogen fluoride.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

**Eye Contact**      Avoid contact with eyes.

**Skin Contact**      Avoid contact with skin.

**Inhalation**      Toxic if inhaled.

**Ingestion**      Toxic if swallowed.

### Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Bifenthrin 82657-04-3	= 54.5 mg/kg ( Rat )	> 2 g/kg ( Rabbit )	-

**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** May cause cancer.

Chemical Name	ACGIH	IARC	NTP	OSHA
Bifenthrin 82657-04-3		Group 2A		X
Imidacloprid 138261-41-3		Group 2A		X

**LEGEND**

**IARC (International Agency for Research on Cancer)**

Group 2A - Probably Carcinogenic to Humans

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

**Product Information (Numerical measures of toxicity)**

**Acute Oral LD50 (Rat):** >175 mg/kg

**Acute Dermal LD50 (Rabbit):** >2,020 mg/kg

**Acute Inhalation LC50 (Rat):** >0.57 mg/L (4-hr)

**Eye Irritation:** Minimally 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 extremely toxic to fish and aquatic invertebrates. Use with care when applying in areas adjacent to any body of water. 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 make applications when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash waters. This product is highly toxic to bees exposed to direct treatment or residues blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. The use of bifenthrin is prohibited in areas that may result in exposure of endangered species to bifenthrin. Prior to use in a particular county, contact the local extension service for procedures and precautions to use to protect endangered species. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

**Component Information**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Bifenthrin 82657-04-3		0.0001 - 0.00019: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.0003 - 0.00038: 96 h Lepomis macrochirus mg/L LC50 flow-through		0.00135 - 0.00195: 48 h Daphnia magna mg/L EC50 Static

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Not determined

**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.

**California Hazardous Waste Status**

Chemical Name	California Hazardous Waste Status
Bifenthrin 82657-04-3	Toxic
Imidacloprid 138261-41-3	Toxic

**14. TRANSPORT INFORMATION****DOT**

**UN/ID No** UN3352  
**Proper Shipping Name** Pyrethroid pesticides, liquid, toxic (bifenthrin)  
**Hazard Class** 6.1  
**Packing Group** III

**IATA**

**UN/ID No** UN3352  
**Proper Shipping Name** Pyrethroid pesticides, liquid, toxic (bifenthrin)  
**Hazard Class** 6.1  
**Packing Group** III

**IMDG**

**UN/ID No** UN3352  
**Proper Shipping Name** Pyrethroid pesticides, liquid, toxic (bifenthrin)  
**Hazard Class** 6.1  
**Packing Group** III  
**Marine Pollutant** Yes

**15. REGULATORY INFORMATION****International Inventories**

**TSCA** Listed

**Legend:**

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

**US Federal Regulations**

**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 %
Bifenthrin - 82657-04-3	82657-04-3	22.1	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
Bifenthrin 82657-04-3	X		

**EPA Pesticide Registration Number** Reg. No. 66222-247**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: Warning

May be fatal if swallowed. Harmful if absorbed through skin. Harmful if inhaled. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

**Difference between SDS and EPA pesticide label**

	EPA	OSHA
<b>Signal Word</b>	Warning	Danger
Acute toxicity - Oral	May be fatal if swallowed	Toxic if swallowed
Acute toxicity - Dermal	Harmful if absorbed through the skin	N/A
Acute toxicity - Inhalation (Dusts/Mists)	Harmful if inhaled	Toxic if inhaled
Carcinogenicity	N/A	May cause cancer



<b>16. OTHER INFORMATION</b>
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**NFPA****Health Hazards****Flammability****Instability****Special Hazards**

Not determined

Not determined

Not determined

Not determined

**HMIS****Health Hazards****Flammability****Physical Hazards****Personal Protection**

Not determined

Not determined

Not determined

Not determined

<b>Issue Date:</b>	11-Mar-2013
<b>Revision Date:</b>	06-Nov-2015
<b>Revision Note:</b>	Updated format from 30-Apr-2014

**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**