

Issue Date: 11/15/2015 Revision Date: Version: 1

## 1. Identification of the Substance/Preparation and of the Company/Undertaking

**Product Identifier** 

Product Name: Broadcide NG

Other means of identification

**EPA Pesticide Registration Number:** 53883-119-48234

Recommended use of the chemical and restrictions on use

Recommended use: EPA registered pesticide.

Details of the supplier of the safety data sheet

Company

Regal Chemical Company 600 Branch Dr., Alpharetta, GA 30004

**Emergency telephone number** 

**Company Telephone:** (770) 475-4837

Emergency Telephone: Chemtrec 1-800-262-8200

## 2. Hazardous Identification

<u>EMERGENCY OVERVIEW</u>: 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: Tan Physical State: Solid Granule Odor: Slightly Musty

## Classification:

Acute Toxicity – Oral	Not classified
Acute toxicity – Inhalation (Vapors)	Not classified
Skin sensitization	Not classified
Carcinogenicity	Not classified
Specific target organ toxicity (repeated exposure)	Not classified

Signal Word: Danger

Hazard statements: Toxic if swallowed

Toxic if inhaled

May cause an allergic skin reaction

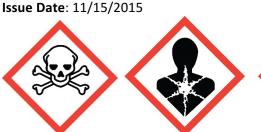
May cause cancer

Causes damage to organs through prolonged or repeated exposure.

Suspected of causing cancer. (Hazard Category 2)



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## **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

Use only outdoors or in well-ventilated area

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Do not breathe dust/fume/gas/mist/vapors/spray

## **Precautionary Statements – Response**

If exposed or concerned: Get medical advice/attention

IF ON SKIN: Wash with plenty of soap and water

Wash contaminated clothing before reuse

If skin irritation or rash occurs: Get medical advice/attention

IF INHALDED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Rinse mouth

## Precautionary Statements - Storage

Store locked up

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

### 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	.2

<sup>\*\*</sup>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\*\*



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## 4. First Aid Measures

### First aid measures:

**General Advice**: If exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.

**Eye Contact**: Rinse immediately with plenty of water, also under the eyelids, for at least 15 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 (or hair): Remove/Take off immediately all contaminated clothing. Wash skin with soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.

**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.

**Ingestion**: Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Immediately call a poison center or doctor/physician.

### Most Important systems and effects, both acute and delayed:

**Symptoms:** Toxic if swallowed. Toxic if inhaled. May cause an allergic skin reaction.

## Indication of any immediate medical attention and special treatment needed:

**Note to physician:** Treat symptomatically. 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.

## 5. Fire-Fighting Measures

Suitable extinguishing media: Dry chemical. Carbon dioxide (CO2). Foam.

Unsuitable extinguishing media: Not determined.

<u>Specific hazards arising from the chemical:</u> May support combustion if exposed to fire. Hazardous Combustion Products: Toxic gases may be formed by fire. Carbon monoxide. Carbon dioxide (CO2). Hydrogen chloride. Hydrogen fluoride. Chlorine. Fluorine.

<u>Protective equipment and precautions for firefighters</u>: 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 drink water supply.



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### 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:**

**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 cleaning up:** Cover liquid spill with sand, earth or other non-combustible absorbent material. Sweep up and shovel into suitable containers for disposal. Dispose of in accordance with federal, state and local regulations. Put damaged packages into a suitable container large enough to hold the entire package and be appropriately sealed. Mark the holding container to identify its contents and follow disposal directions.

## 7. Handling and Storage

Precautions for safe handling: Handle in accordance with good industrial hygiene and safety practice. 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. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes or clothing. Use outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Avoid spillage. NOTE: DO NOT apply water-based dilutions of Broadcide NG to electrical conduits, motor housings, junction boxes, switch boxes or other electrical equipment because of possible shock hazard.

### Conditions for safe storage, including any incompatibilities:

**Storage Conditions:** Do not contaminate water, food, or feed by storage or disposal. Keep/store only in original container. Store locked up. Store at ambient conditions. Protect from excessive heat. Keep container tightly closed and store in a cool, dry and well-ventilated place. Do not use food or drink containers for mixing or storage.

**Packing Materials**: Do not reuse container.

**Incompatible Materials**: None known based on information supplied.

## 8. Exposure Controls/Personal Protection

#### **Control Parameters**

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



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### Appropriate engineering controls:

**Engineering Controls**: 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 OF END USE PROD

### Individual protection measures, such as personal protective equipment

**Eye/Face protection**: Wear safety glasses with side shields (or goggles).

**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: Granule Appearance: Tan granule

Color: Tan

**Odor:** Slightly Musty

Odor Threshold: Not determined

Property: Values Remarks / Methods

**pH:** 5.8-6.2

Melting point / Freezing Point: Not determined Boiling Point / Boiling Range: Not determined

Flash Point:  $> 100^{\circ} \text{ C} / > 212^{\circ} \text{ F}$ 

**Evaporation Rate:** Not determined

Flammability (solid, gas): Liquid – Not applicable

Upper flammability Limit: Not applicable

Lower flammability Limit: Not applicable

Vapor Pressure: Not determined Vapor Density: Not determined

Specific Gravity: 1.038 @ $20^{\circ}$  C ( $68^{\circ}$  F)

Water Solubility: Dispersible

Partition Coefficient: Not determined Autoignition Temperature: Not determined



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**Decomposition Temperature:** Not determined

Oxidizing Properties: Not determined

## 10. Stability and Reactivity

**Reactivity:** Not reactive under normal conditions.

Chemical Stability: Stable under recommended storage conditions.

<u>Possibility of Hazardous Reactions</u>: None under normal processing. **Hazardous Polymerization**: Hazardous polymerization does not occur.

<u>Conditions to Avoid</u>: Keep out of reach of children. Excessive heat and fire. NOTE: DO NOT apply water-based dilutions of Broadcide NG to electrical conduits, motor housings, junction boxes, switch boxes or other electrical equipment because of possible shock hazard.

**Incompatible Materials**: None known based on information supplied.

<u>Hazardous Decomposition Products</u>: Toxic gases may be formed by fire. Carbon monoxide. Carbon dioxide (CO2). Hydrogen chloride. Hydrogen fluoride. Chlorine. Fluorine.

## 11. Toxicological Information

## Information on likely routes of exposure

**Product Information** 

**Inhalation**: Toxic if inhaled.

**Eye Contact**: Avoid contact with eyes. **Skin Contact**: Avoid contact with skin.

**Ingestion**: Toxic if swallowed.

### **Component Information:**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Bifenthrin	=54.5 mg/kg ( Rat )	> 2 g/kg ( Rabbit ) = 790	=.61 mg/L ( Rat ) 1 h
82657-04-3	= 47 mg/kg ( Rat )	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

**Sensitization**: May cause an allergic skin reaction.

Carcinogenicity: May cause cancer.

<b>Chemical Name</b>	ACGIH	IARC	NTP	OSHA
Bifenthrin		Group 2A		Х
82657-04-3				



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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

STOT - Repeated Exposure: Causes damage to organs through prolonged or repeated exposure.

Numerical measures of toxicity: Not determined

## 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 on 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.

### Component Information:

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

Persistence and degradability: Not determined.

**Bioaccumulation**: Not determined.

Other adverse effects: Not determined.

## 13. Disposal Considerations

### Waste treatment methods

**Disposal of wastes**: END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide,



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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 at the nearest EPA Regional Office for guidance. 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.

**Contaminated packaging**: Put damaged packages into a suitable container large enough to hold the entire package and be appropriately sealed. Mark the holding container to identify its contents and follow disposal directions. 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

## 14. Transport Information

<u>Note</u>: Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**: Not regulated.

### IATA

**UN/ID No:** UN3082

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

Hazard Class: 9
Packing Group: III

**Description**: Marine Pollutant

### **IMDG**

**UN/ID No:** UN3082

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

Hazard Class: 9
Packing Group: III

**Description**: Marine Pollutant



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## 15. Regulatory Information

#### **International Inventories**

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSCS	KECL	PICCS	AICS
Bifenthrin						Present	Χ	Present		

### Legend:

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

**DSL/NDSL**: Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS: European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances.

**ENCS:** Japan Existing and New Chemical Substances **IECSC:** China Inventory and 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.

Chemical Name	CAS No	Weight-%	SARA 313 – Threshold Values %
Bifenthrin -82657-04-3	82657-04-3	.2	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:** 53883-125-48234

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.



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EPA Pesticide Label
Signal Word: Caution

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

Difference between SDS and EPA pesticide label

	EPA	OSHA
Signal Word	Caution	Danger
Acute toxicity – Oral	Harmful if swallowed	Toxic if swallowed
Acute toxicity – Dermal	Harmful if absorbed through skin	N/a
Acute toxicity – Inhalation (Vapors)	Harmful if inhaled	Toxic if inhaled
Skin sensitization	N/a	May cause an allergic skin
		reaction
Carcinogenicity	N/a	May cause cancer
STOT – repeated exposure	N/a	Causes damage to organs
		through prolonged or
		repeated exposure. Ca

## 16. Other Information

NFPA: HMIS

Health Hazards: 1Health hazards: 1Flammability: 1Flammability: 1Instability: 0Physical hazards: 0

Special Hazards: Not determined Personal protection: Not determined

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