

## 1. IDENTIFICATION

**Product identifier**

**Product Name** Sharda Bifenthrin 17.15% LFR

**Other means of identification**

**Product Code** 83529-79

**UN/ID no** UN3352

**Synonyms** Seguro

**Registration Number(s)** 83529-79

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Pesticide

**Uses advised against** Consumer use

**Details of the supplier of the safety data sheet**

**Manufacturer Address**

Sharda USA LLC  
P.O. Box 640  
Hockessin, DE 19707  
Website: www.shardausa.com

**Emergency telephone number**

**Company Phone Number** 610-350-6930 (US)  
+91 22 5678 2800 (India)  
**Emergency Telephone** CHEMTREC: 800-424-9300  
CHEMTREC: 703-527-3887  
POISON CONTROL CENTER: 800-222-1222

## 2. HAZARDS IDENTIFICATION

**Classification**

**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 1

**Label elements**

**Danger**

**Emergency Overview**

**Hazard statements**

Toxic if swallowed  
Harmful if inhaled  
Suspected of causing cancer  
Causes damage to organs  
Causes damage to organs through prolonged or repeated exposure

**Appearance** Opaque aqueous solution**Physical state** liquid**Odor** Slight**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 a well-ventilated area  
 Do not breathe dust/fume/gas/mist/vapors/spray

**Precautionary Statements - Response**

Specific treatment (see instructions on this label)  
 IF exposed: Call a POISON CENTER or doctor/physician  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
 Rinse mouth

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Mild eye irritation. Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

**Unknown acute toxicity**

0% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**

Not applicable

**Mixture**

Chemical Name	CAS No	Weight-%
Other ingredients	Proprietary	82.85
Bifenthrin	82657-04-3	17.15

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

## 4. FIRST AID MEASURES

### Description of first aid measures

<b>General advice</b>	Call a poison control center or doctor for treatment advice. Have the product containers or label with you when calling a poison control center or doctor, or going for treatment.
<b>Eye contact</b>	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.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. If skin irritation persists, call a physician. Call a poison control center or doctor for treatment advice.
<b>Inhalation</b>	Move victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician or poison control center immediately. Administer oxygen if breathing is difficult.
<b>Ingestion</b>	Call a physician or poison control center immediately. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.
<b>Self-protection of the first aider</b>	Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

### Most important symptoms and effects, both acute and delayed

**Symptoms** May cause redness and tearing of the eyes.

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

**Note to physicians** This product contains 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 so should be avoided. May cause sensitization in susceptible persons. Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

### Suitable extinguishing media

Dry chemical, CO<sub>2</sub>, water spray or regular foam. Move containers from fire area if you can do it without risk. Dike fire-control water for later disposal. Water spray, fog or regular foam.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

### Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Combustible material.

**Hazardous combustion products** Carbon oxides. Hydrogen halides.

### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

### 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. Avoid runoff to waterways and sewers.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Keep people away from and upwind of spill/leak.
<b>For emergency responders</b>	Use personal protection recommended in Section 8. Ventilate the area.

### Environmental precautions

<b>Environmental precautions</b>	Prevent entry into waterways, sewers, basements or confined areas.
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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.
<b>Methods for cleaning up</b>	Cover liquid spill with sand, earth or other non-combustible absorbent material. Sweep up and shovel into suitable containers for disposal.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

<b>Advice on safe handling</b>	Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment as required. Wash thoroughly after handling. Wash contaminated clothing before reuse. 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.
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### Conditions for safe storage, including any incompatibilities

<b>Storage Conditions</b>	Keep out of the reach of children. Keep/store only in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from food, drink and animal feeding stuffs.
<b>Packaging materials</b>	Do not reuse container.
<b>Incompatible materials</b>	Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

<b>Exposure Guidelines</b>	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

<b>Engineering Controls</b>	Ensure adequate ventilation, especially in confined areas. And. Showers. Eyewash stations. Ventilation systems.
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### Individual protection measures, such as personal protective equipment

<b>Eye/face protection</b>	Tight sealing safety goggles.
<b>Skin and body protection</b>	Wear suitable protective clothing. Wear protective butyl rubber gloves. Protective shoes or boots.
<b>Respiratory protection</b>	Ensure adequate ventilation, especially in confined areas. If exposure limits are exceeded

or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations**

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odor</b>	Slight
<b>Appearance</b>	Opaque aqueous solution	<b>Odor threshold</b>	No information available
<b>Color</b>	White		
<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>	
<b>pH</b>	6.3	solution (1 %)	
<b>Melting point / freezing point</b>	No information available		
<b>Boiling point / boiling range</b>	No information available		
<b>Flash point</b>	> 100 °C / > 212 °F	Seta Closed Cup	
<b>Evaporation rate</b>	No information available		
<b>Flammability (solid, gas)</b>	No information available		
<b>Flammability Limit in Air</b>			
<b>Upper flammability limit:</b>	No information available		
<b>Lower flammability limit:</b>	No information available		
<b>Vapor pressure</b>	~17 mmHg	@ 25 °C	
<b>Vapor density</b>	No information available		
<b>Relative density</b>	1.0276		
<b>Water solubility</b>	Miscible in water		
<b>Solubility in other solvents</b>	No information available		
<b>Partition coefficient</b>	No information available		
<b>Autoignition temperature</b>	No information available		
<b>Decomposition temperature</b>	No information available		
<b>Kinematic viscosity</b>	> 200 mm <sup>2</sup> /s	@ 40 °C	
<b>Dynamic viscosity</b>	No information available		
<b>Explosive properties</b>	Not an explosive		
<b>Oxidizing properties</b>	Not applicable		

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	~8.5 lb/gal

## 10. STABILITY AND REACTIVITY

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Elevated Temperature. Storage near to reactive materials.

**Incompatible materials**

Strong oxidizing agents.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Nitrogen oxides (NOx). Carbon oxides. Hydrogen halides.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

<b>Product Information</b>	Acute Oral LD50 (rat): 175 mg/kg Acute Dermal LD50 (rabbit): > 5000 mg/kg Irritation (rabbit): Causes mild eye irritation. Skin Irritation (rabbit): Not an irritant. Inhalation LC50 (rat): >2.28 mg/L (4 HR) Skin Sensitization (guinea pig): Not a sensitizer.
<b>Inhalation</b>	Harmful by inhalation.
<b>Eye contact</b>	Based on available data, the classification criteria are not met. May cause slight irritation.
<b>Skin contact</b>	Based on available data, the classification criteria are not met.
<b>Ingestion</b>	Toxic if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Other ingredients	> 90 mL/kg ( Rat )	-	-
Bifenthrin 82657-04-3	= 54.5 mg/kg ( Rat )	= 790 mg/kg ( Rat ) > 2 g/kg ( Rabbit )	= 0.61 mg/L ( Rat ) 1 h

**Information on toxicological effects**

**Symptoms** May cause redness and tearing of the eyes.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** Based on available data, the classification criteria are not met.  
**Germ cell mutagenicity** Based on available data, the classification criteria are not met.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

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

*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*

**Reproductive toxicity** Based on available data, the classification criteria are not met.  
**STOT - single exposure** May cause disorder and damage to the. Central nervous system.  
**STOT - repeated exposure** Causes damage to organs through prolonged or repeated exposure.  
**Chronic toxicity** Repeated or prolonged exposure may cause central nervous system damage.  
**Target Organ Effects** Central nervous system.  
**Aspiration hazard** Based on available data, the classification criteria are not met.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 317.0 mg/kg

ATEmix (inhalation-dust/mist) 2.92 mg/l

## 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 run-off from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

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 if bees are 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.

76.85 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	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
1,2-Propylene glycol 57-55-6	19000: 96 h Pseudokirchneriella subcapitata mg/L EC50	51600: 96 h Oncorhynchus mykiss mg/L LC50 static 41 - 47: 96 h Oncorhynchus mykiss mL/L LC50 static 51400: 96 h Pimephales promelas mg/L LC50 static 710: 96 h Pimephales promelas mg/L LC50	1000: 48 h Daphnia magna mg/L EC50 Static 10000: 24 h Daphnia magna mg/L EC50

### Persistence and degradability

Not readily biodegradable.

: Bifenthrin degrades slowly in soil, the rate being influenced by soil characteristics; it is also stable in the aquatic environment. Bifenthrin, present at a concentration of 4.5 mg/kg and incubated for 24 months, was very stable to biodegradation in one soil (red brown earth: pH 7.1, 1.2% organic carbon, 59.1% sand, 28.3% silt, 10.5% clay) and two bedding materials (sand-dolomite (pH 9.2, 0.1% organic carbon, 80.2% sand) and quarry sand (pH 9.6, 0.2% organic carbon, 55.0% sand)). Degradation rate constants were  $5.2 \times 10^{-4}$ ,  $4.9 \times 10^{-4}$ , and  $5.0 \times 10^{-4}$  /day corresponding to half-lives of 1332, 1410, and 1386 days, respectively. Soil moisture had little effect on the rate of biodegradation.

### Bioaccumulation

Bioaccumulative potential.

### Other adverse effects

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT)

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### Disposal of wastes

Pesticide wastes may be acutely hazardous. Improper disposal is a violation of federal law. Disposal should be in accordance with applicable regional, national and local laws and regulations. Contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance on proper disposal of waste product.

#### Contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations. Consult product label for additional information. Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

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

#### 14. TRANSPORT INFORMATION

##### DOT

UN/ID no UN3352  
 Proper shipping name Pyrethroid pesticide, liquid, toxic  
 Hazard Class 6.1  
 Packing Group III  
 Special Provisions IB3, T7, TP2, TP28  
 Description UN3352, Pyrethroid pesticide, liquid, toxic mixture, 6.1, III  
 Emergency Response Guide Number 151

##### TDG

UN/ID no UN3352  
 Proper shipping name Pyrethroid pesticide, liquid, toxic mixture  
 Hazard Class 6.1  
 Packing Group III  
 Description UN3352, Pyrethroid pesticide, liquid, toxic mixture (Bifenthrin), 6.1, III

##### IATA

UN/ID no UN3352  
 Proper shipping name Pyrethroid pesticide, liquid, toxic  
 Hazard Class 6.1  
 Packing Group III  
 ERG Code 6L  
 Special Provisions A3, A4  
 Description UN3352, Pyrethroid pesticide, liquid, toxic (Bifenthrin), 6.1, III

##### IMDG

UN/ID no UN3352  
 Proper shipping name Pyrethroid pesticide, liquid, toxic  
 Hazard Class 6.1  
 Packing Group III  
 EmS-No F-A, S-A  
 Special Provisions 61, 223, 274  
 Description UN3352, Pyrethroid pesticide, liquid, toxic (Bifenthrin), 6.1, III, Marine Pollutant

#### 15. REGULATORY INFORMATION

##### International Inventories

TSCA Complies  
 DSL/NDL Complies  
 EINECS/ELINCS Complies  
 IECS Complies  
 KECL Complies  
 PICCS Complies  
 AICS Complies



**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 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 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	SARA 313 - Threshold Values %
Bifenthrin - 82657-04-3	1.0

**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

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**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
Other ingredients	-	-	X
Bifenthrin 82657-04-3	X	-	-
1,2-Propylene glycol 57-55-6	X	-	X

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** 83529-79

**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:

**Difference between SDS and EPA Pesticide label**

WARNING. May be fatal if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<u><b>NFPA</b></u>	Health hazards 2	Flammability 0	Instability 0	Physical and Chemical Properties -
<u><b>HMIS</b></u>	Health hazards 2*	Flammability 0	Physical hazards 0	Personal protection X
<i>Chronic Hazard Star Legend</i>	<i>* = Chronic Health Hazard</i>			

Issue Date 11-Jul-2017

Revision Date 11-Jul-2017

**Revision Note**

No information available

**Disclaimer**

The information provided in this Material 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**