

SAFETY DATA SHEET



Date Issued : 2/27/2015
SDS No : Nirvana RTU
Date Revised : 1/4/2018
Revision No : 1

Nirvana RTU

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Nirvana RTU
PRODUCT CODE: 89168-36-91395
CHEMICAL FAMILY: Insecticide
GENERIC NAME: Bifenthrin

DISTRIBUTOR

ALTITUDE CROP INNOVATIONS LLC
 1880 Fall River Drive
 Suite 100
 Loveland, CO 80538

24 HR. EMERGENCY TELEPHONE NUMBERS

24-Hour Emergency Assistance Call: 1-800-222-1222
 Chemical Emergency Call CHEMTREC: 1-800-424-9300

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Acute Toxicity (Oral), Category 3
 Acute Toxicity (Dermal), Category 5
 Acute Toxicity (Inhalation), Category 3
 Skin Irritation, Category 2
 Eye Irritation, Category 2A
 Skin Sensitization, Category 1B

GHS LABEL



Exclamation
mark



Skull and
crossbones

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H301: Toxic if swallowed.
 H313: May be harmful in contact with skin.
 H331: Toxic if inhaled.
 H315: Causes skin irritation.
 H319: Causes serious eye irritation.
 H317: May cause an allergic skin reaction.

PRECAUTIONARY STATEMENTS

General:

P101: If medical advice is needed, have product container or label at hand.
 P102: Keep out of reach of children.
 P103: Read label before use.

Prevention:

- P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
 P264: Wash hands, face and other affected areas thoroughly after handling.
 P270: Do not eat, drink or smoke when using this product.
 P271: Use only outdoors or in a well-ventilated area.
 P272: Contaminated work clothing should not be allowed out of the workplace.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

- P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P321: Specific treatment see Section 4, First Aid Measures, on this SDS.
 P330: Rinse mouth.
 P312: Call a POISON CENTER or doctor/physician if you feel unwell.
 P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
 P311: Call a POISON CENTER or doctor/physician.
 P302+P352: IF ON SKIN: Wash with plenty of soap and water.
 P332+P313: If skin irritation occurs: Get medical advice/attention.
 P362: Take off contaminated clothing and wash before reuse.
 P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
 P363: Wash contaminated clothing before reuse.
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337+P313: If eye irritation persists: Get medical advice/attention.

Storage:

- P405: Store locked up.
 P403+P233: Store in a well-ventilated place. Keep container tightly closed.

Disposal:

- P501: Dispose of contents/container to Local, State and Federal Regulations.

SENSITIZATION: This product is considered to be a skin sensitizer.

COMMENTS HEALTH: Read all precautions of products being handled and follow the most restrictive language for all products to provide the safest work environment.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Bifenthrin	17.15	82657-04-3
Other Ingredients	82.85	Mixture

4. FIRST AID MEASURES

EYES: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes then continue rinsing eyes. Call a poison control center or doctor for treatment advice.

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

INGESTION: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

INHALATION: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

NOTES TO PHYSICIAN: 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. This product contains a petroleum distillate; vomiting may cause aspiration pneumonia.

ADDITIONAL INFORMATION: Have the product container or label with you when calling a poison control center or doctor, or going in for treatment. For emergency medical assistance call **NPCC 1-800-222-1222** or call **CHEMTREC 1-800-424-9300**.

5. FIRE FIGHTING MEASURES

GENERAL HAZARD: Toxic fumes may be emitted in a fire situation.

EXTINGUISHING MEDIA: Foam, dry chemical, carbon dioxide, water spray or fog.

HAZARDOUS COMBUSTION PRODUCTS: Normal combustion forms carbon dioxide, water vapor and may produce oxides of carbon, nitrogen and phosphorous.

EXPLOSION HAZARDS: No specific explosion hazards are identified or expected. Always fight fire with the implication that other volatile substances may be present.

FIRE FIGHTING PROCEDURES: Evacuate area and fight fire upwind a safe distance to avoid hazardous vapors and decomposition products. Fire exposed containers can build up pressure and should be kept cool with water spray if possible. Explosive vapor could form from ruptured containers. Dike and collect water used to fight fire to prevent environmental damage due to runoff. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

FIRE FIGHTING EQUIPMENT: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

COMMENTS: Do not allow extinguishing media to spread to adjacent land or water. Dike and collect all runoff to avoid environmental contamination.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Immediately pick up spilled liquid with absorbent material and sweep up for disposal. Place it and damaged unusable containers in a landfill appropriate for non hazardous chemical waste. Wash the contaminated area with detergent and soap solution. Check local, state, and federal regulations for proper disposal.

LARGE SPILL: Immediately dike around the spill area to prevent spreading. Pick up spilled material with suitable absorbent material and place in appropriate container for disposal. Place it and unusable containers in a landfill appropriate for non hazardous chemical waste. Check local, state, and federal regulations for proper disposal.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Do not contaminate any body of water.

LAND SPILL: Avoid runoff onto any adjacent land.

GENERAL PROCEDURES: Avoid inhalation of vapors/spray and contact with skin and eyes. Work in a properly ventilated area. Wear the proper personal protective equipment listed in Section 8.

SPECIAL PROTECTIVE EQUIPMENT: Always wear proper protective equipment when handling this product.

COMMENTS: This product is known to be environmentally hazardous. Do not contaminate any body of water or any adjacent land outside of the targeted application area.

7. HANDLING AND STORAGE

HANDLING: Wash hands after handling, before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

STORAGE: Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Store product above 40°F to avoid freezing. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

STORAGE TEMPERATURE: (40°F) Minimum to (100°F) Maximum

Notes: DO NOT ALLOW THIS PRODUCT TO FREEZE. Store at temperatures greater than 40°F to ensure product consistency.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear chemical goggles or shielded safety glasses (ANSI Z87.1 or approved equivalent) when handling and

mixing product. Contact lenses should not be worn when working with chemicals.

SKIN: Wear chemical resistant gloves such as Viton or barrier laminate, Coveralls over long-sleeved shirt, long pants and chemical resistant footwear plus socks. Chemical resistant headgear for overhead exposure. When exposed to product concentrate, wear a chemical resistant apron. Always refer to the label of the pesticide(s) in the tank mix and follow the most restrictive requirements.

RESPIRATORY: Proper ventilation is required when handling or using this product to keep exposure to airborne contaminants below the exposure limit.

PROTECTIVE CLOTHING: Eye protection, long sleeved shirt and long pants, shoes plus socks and chemical resistant gloves. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

OTHER USE PRECAUTIONS: Avoid contact with skin, eyes, and clothing. Avoid breathing vapors. Wash thoroughly after handling product. Eye wash fountains and drench showers should be located within 100 feet or a 10 second walk from the work area per ANSI Z358.1-1990

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Aromatic

APPEARANCE: Slightly viscous liquid

COLOR: Light amber

pH: 7.57 to 7.62

PERCENT VOLATILE: Not Established

FLASH POINT AND METHOD: > (200 °F)

AUTOIGNITION TEMPERATURE: Not Established

VAPOR PRESSURE: Not Established

VAPOR DENSITY: Not Established

BOILING POINT: Not Established

FREEZING POINT: < (40 °F)

MELTING POINT: Not Established

POUR POINT: Not Established

THERMAL DECOMPOSITION: Not Established

SOLUBILITY IN WATER: Emulsifies

EVAPORATION RATE: Not Established

DENSITY: Not Established

SPECIFIC GRAVITY: 1.039 g/mL

VISCOSITY #1: 130.6 Centistokes at 20°C

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Freezing temperatures.

INCOMPATIBLE MATERIALS: 10% Potassium permanganate solution. Reactions have been observed within two minutes of exposure.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: > 2000 mg/kg (Rat)

SKIN ABSORPTION: .5-2 Rabbit

Nirvana RTU

ORAL LD₅₀: 98.11 mg/kg**INHALATION LC₅₀:** > 2.13 mg/L**EYE EFFECTS:** Causes serious eye irritation.**SKIN EFFECTS:** Causes skin irritation.**CARCINOGENICITY****Notes:** Not listed in OSHA, NTP, IARC or ACGIH**SENSITIZATION:** This product is considered to be a skin sensitizer.**12. ECOLOGICAL INFORMATION**

ENVIRONMENTAL DATA: 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 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 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.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Do not reuse product containers. Triple rinse (or equivalent), then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by local, state, and federal regulations.

14. TRANSPORT INFORMATION**DOT (DEPARTMENT OF TRANSPORTATION)****PROPER SHIPPING NAME:** Pyrethroid pesticide, liquid, toxic**TECHNICAL NAME:** Bifenthrin**PRIMARY HAZARD CLASS/DIVISION:** 6.1 Toxic**UN/NA NUMBER:** UN 3352**PACKING GROUP:** III**PLACARDS:** 6.1 Poison (Toxic)**LABEL:** 6.1 Poison (Toxic)**MARINE POLLUTANT #1:** Bifenthrin**15. REGULATORY INFORMATION****UNITED STATES****SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)****311/312 HAZARD CATEGORIES:** Immediate, Delayed**FIRE:** No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** Yes**313 REPORTABLE INGREDIENTS:** Bifenthrin**EPCRA SECTION 313 SUPPLIER NOTIFICATION**

Chemical Name	Wt.%	CAS
Bifenthrin	17.15	82657-04-3

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)**CERCLA RQ:** Not Listed

Nirvana RTU

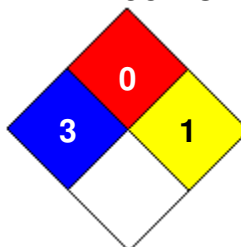
GENERAL COMMENTS:**PRECAUTIONARY STATEMENTS****Hazards to Humans (and Domestic Animals)**

Warning - May be fatal if swallowed. Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.

16. OTHER INFORMATION

REASON FOR ISSUE: New Revision

REVISION SUMMARY: This SDS replaces the 2/27/2015 SDS. Revised: **Section 1: REASON FOR ISSUE.**

NFPA CODES**GENERAL STATEMENTS: DISCLAIMER AND LIMITATION OF LIABILITY**

This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and ALTITUDE CROP INNOVATIONS, LLC, disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.