



# SAFETY DATA SHEET

## HY-END Bifen ITP

### SECTION 1: IDENTIFICATION

**Product Name:** HY-END BIFEN ITP  
**EPA Registration No.:** 53883-250-83996  
**Recommended Use:** Insecticide; See product label for a complete list of uses and use sites.  
**Restrictions on Use:** See product label for any restrictions on the use of this product.  
**Chemical Family:** Pyrethroid  
**Chemical Name of Active Ingredient(s):** Bifenthrin: 2-Methyl-3-phenylphenyl)methyl (1S,3S)—[(Z)-2-chloro-3,3,3-trifluoroprop-1-enyl]-2,2-dimethylcyclopropane-1-carboxylate  
**Manufactured for:** NaturChem Inc.  
 270 Bruner Road  
 Lexington, SC 29072

**FOR FIRE, SPILL, AND/OR LEAK EMERGENCIES CONTACT: CHEMTREC 1-800-424-9300**

**FOR MEDICAL EMERGENCIES AND HEALTH AND SAFETY INQUIRIES CONTACT: 800-222-1222**

### SECTION 2: HAZARD(S) IDENTIFICATION

**EMERGENCY OVERVIEW:** Tan granule with a slight musty odor.

**OSHA HCS CLASSIFICATION (29 CFR 1910.1200)**

Specific Target Organ Toxicity – Repeated Exposure	Category 1
Carcinogenicity	Category 1A

**Signal Word:** DANGER



**Hazard Statement(s):** Causes damage to organs (lung/respiratory system) through prolonged or repeated exposure (inhalation).  
 May cause cancer (inhalation).

**Precautionary Statement(s):**

**Prevention:** Obtain special instructions before use.  
 Do not handle until all safety precautions have been read and understood.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 Do not breathe dust.  
 Wash hands thoroughly after handling.  
 Do not eat, drink or smoke when using this product.

**Response:** **IF EXPOSED OR CONCERNED:** Get medical advice/attention.  
 Get medical advice/attention if you feel unwell.

**Storage:** Store locked up.

**Disposal:** Dispose of contents/container in accordance with Federal, state and local laws and regulations.

The following percentage of the mixture consists of components with unknown hazards regarding the acute toxicity:

- 100% Acute oral toxicity
- 100% Acute dermal toxicity
- 100% Acute Inhalation toxicity
- 100% Eye irritation

100% Skin irritation

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS Number	Weight %
Bifenthrin	82657-04-3	0.2%
Dolomite Limestone (contains)	16389-88-1	0 – 99.0%
Crystalline silica	14808-60-7	0 – 15.0%

\*Ingredients not listed or listed with a weight % range are considered a trade secret and are withheld under 29 CFR 1910.1200(i).

**SECTION 4: FIRST AID MEASURES**

<b>IF IN EYES:</b>	Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes; then continue rinsing eye. Call a poison control center or doctor for treatment advice.
<b>IF ON SKIN:</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.
<b>IF INHALED:</b>	Move person to fresh air. If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
<b>IF INGESTED:</b>	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**Note to Physician:** This product is a pyrethroid. If large amounts have been ingested, the stomach and intestine should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils or alcohol may increase absorption and should be avoided.

**Most important symptoms/effects, acute and delayed:** Acute symptoms include irritation to eyes, skin and respiratory tract. Repeated inhalation may cause silicosis or cancer.

**SECTION 5: FIRE-FIGHTING MEASURES**

<b>Suitable Extinguishing Media:</b>	Use appropriate extinguishing media for surrounding fire.
<b>Unsuitable Extinguishing Media:</b>	Heavy water stream
<b>Hazardous Combustion Products:</b>	Thermal decomposition may produce oxides of carbon, nitrogen, calcium and magnesium.
<b>Special Protective Equipment &amp; Precautions:</b>	Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Foam and/or dry chemical are preferred to minimize environmental contamination. If water is used, dike and collect water to prevent run-off. Wear self-contained breathing apparatus and full fire-fighting turn-out gear (Bunker gear).
<b>Unusual Fire &amp; Explosion Hazards:</b>	None known

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions:</b>	See Section 8 for personal protection equipment.
<b>Environmental Precautions:</b>	Keep spilled material and any rinsate from contaminating soil or from entering sewage and drainage systems and bodies of water.
<b>Methods for Containment:</b>	Isolate the spill area. Keep unnecessary and unprotected personnel from entering. Avoid inhalation of dust. Avoid actions that cause dust to become airborne.
<b>Methods for Clean-up:</b>	Uncontaminated product may be placed in a container for use according to label directions. Do not put spilled material back in the original container. Avoid actions that cause dust to become airborne during dry clean-up such as sweeping or using compressed air. Use HEPA vacuum or thoroughly wet with water to clean-up dust. Pick up wash liquid with additional absorbent and place in a disposable container.
<b>Other Information:</b>	None known

**SECTION 7: HANDLING AND STORAGE**

<b>Handling:</b>	RECOMMENDATIONS ARE INTENDED FOR MANUFACTURING, PACKAGING AND COMMERCIAL BLENDING WORKERS. PESTICIDE APPLICATORS AND WORKERS must refer to the product label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Handle and open container in a manner as to prevent spillage. Do not eat, drink or smoke while handling this product. Immediately wash off accidental splashes of the concentrate or spray mixture from skin, clothing and out of eyes.
<b>Storage:</b>	<b>See pesticide label for full information on product storage.</b> Do not contaminate water, food or feed by storage of this product. Store away from sources of heat, out of direct sunlight and away from incompatible materials. Pesticides should be stored in secured areas away from children and animals.
<b>Storage Temperature (Min/Max):</b>	Not determined
<b>Product Incompatibilities:</b>	Hydrofluoric acid. Strong oxidizers.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Users of a pesticide product must refer to the product label for personal protective equipment requirements.**

**Exposure Guidelines:**

COMPONENT	OSHA PEL	ACGIH TLV	NIOSH REL
Crystalline silica	250 mppcf/%SiO <sub>2</sub> +5 (STEL) 10 mg/m <sup>3</sup> /%SiO <sub>2</sub> +2 (STEL)	0.025 mg/m <sup>3</sup> (TWA)	0.05 mg/m <sup>3</sup> (TWA)

**Engineering Controls:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred.

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<b>Respiratory Protection:</b>	In areas of poor ventilation or where exposure limits are exceeded, use a NIOSH approved respirator with cartridges/canisters approved for pesticides and silica dust.
<b>Eye Protection:</b>	Chemical goggles or safety glasses and full-face shield.
<b>Protective Gloves:</b>	Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile, neoprene rubber, polyvinyl chloride (PVC) or Viton.
<b>Other Protective Clothing:</b>	Long-sleeved shirt, long pants and shoes plus socks.
<b>General Safety Measures:</b>	Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately after handling this product. Wash outside of gloves before removing. 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.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Tan granule (solid)	<b>Upper/Lower Flammability Limits:</b>	Not determined
<b>Odor:</b>	Slight musty odor	<b>Vapor Pressure:</b>	Not applicable
<b>Odor Threshold:</b>	Not determined	<b>Vapor Density:</b>	Not applicable
<b>pH (1% dispersion):</b>	Not applicable	<b>Bulk Density:</b>	100 lbs/ft <sup>3</sup>
<b>Melting /Freezing Point:</b>	Not determined	<b>Solubility:</b>	Not determined
<b>Boiling Point/Range:</b>	Not determined	<b>Partition Coefficient:</b>	Not determined
<b>Flash Point:</b>	Not determined	<b>Auto-ignition Temperature:</b>	Not determined
<b>Evaporation Rate:</b>	Not determined	<b>Decomposition Temperature:</b>	Not determined
<b>Flammability:</b>	Not applicable	<b>Viscosity:</b>	Not applicable

## SECTION 10: STABILITY AND REACTIVITY

<b>Reactivity:</b>	Dolomitic limestone dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride and oxygen trifluoride.
<b>Chemical Stability:</b>	Stable under normal storage and handling conditions.
<b>Possibility of Hazardous Reactions:</b>	No potential for hazardous reactions known unless mixed with incompatible substances.
<b>Conditions to Avoid:</b>	Excessive heat.
<b>Incompatible Materials:</b>	Hydrofluoric acid. Strong oxidizers.
<b>Hazardous Decomposition Products:</b>	Thermal decomposition may produce oxides of carbon, nitrogen, calcium and magnesium.

## SECTION 11: TOXICOLOGICAL INFORMATION

<b>Likely Routes of Exposure:</b>	Eye contact, Skin contact, Inhalation, Ingestion
<b>Symptoms of Exposure:</b>	Irritation of eyes, skin and respiratory tract.
<b>Oral LD<sub>50</sub>:</b>	Not determined
<b>Dermal LD<sub>50</sub>:</b>	Not determined
<b>Inhalation LC<sub>50</sub>:</b>	Not determined
<b>Eye Irritation/Damage:</b>	Not determined

**Skin Corrosion/Irritation:** Not determined

**Skin Sensitization:** Not determined

**Chronic/Subchronic Toxicity:** Crystalline silica is known to cause silicosis after repeated inhalation. There are three types of silicosis: 1) simple chronic silicosis – results from long-term exposure (more than 20 years) to low amounts of respirable crystalline silica; 2) Accelerated silicosis – occurs after exposure to larger amounts of respirable crystalline silica over a shorter period of time (5-15 years); 3) Acute silicosis – results from short-term exposure to very large amounts of respirable crystalline silica.

**Mutagenicity:** No data available

**Reproductive Toxicity:** No data available

**Neurotoxicity:** No data available

**Target Organs:** Lungs, respiratory system

**Aspiration Hazard:** Not anticipated to be an aspiration hazard.

**Carcinogenicity:** See below.

Chemical Name	ACGIH	IARC	NTP	OSHA
Crystalline silica		Group 1	Known Human Carcinogens	

## SECTION 12: ECOLOGICAL INFORMATION

### Environmental Hazards Statement from FIFRA Regulated Pesticide Label:

This pesticide is extremely toxic to fish and aquatic invertebrates. Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters or rinsate.

**ECOTOXICITY DATA:** Data presented below is on the bifenthrin technical product.

**Fish Toxicity:** *S. gairdneri*: 96-hour LC<sub>50</sub> = 0.1 mg/L

**Aquatic Invertebrate Toxicity:** *Daphnia magna*: 96-hour EC<sub>50</sub> = 0.65 mg/L

**Aquatic Plant Toxicity:** *P. subcapitata*: EC<sub>50</sub> = 11.04 mg/L

**Avian Toxicity:** Bobwhite quail: oral LD<sub>50</sub> = 1800 mg/kg

**Honeybee Toxicity:** Oral LD<sub>50</sub> = 0.39 µg/bee

### ENVIRONMENTAL EFFECTS:

**Persistence and Degradability:** No data available

**Bioaccumulation:** No data available

**Mobility:** No data available

**Other Adverse Effects:** No data available

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal:** Refer to the pesticide label for full information on disposal. Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used 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 in proper disposal methods.

**Container Disposal:** Refer to the pesticide label for full information on disposal. When possible, triple rinse the container and offer for recycling if available.

**RCRA Characteristics:** It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste.

**SECTION 14: TRANSPORTATION INFORMATION**

**DOT (Ground):** Not regulated

**IMDG (Sea):** UN3077, Environmentally hazardous substance, solid, n.o.s. (Bifenthrin), 9, PGIII

**IATA (Air):** UN3077, Environmentally hazardous substance, solid, n.o.s. (Bifenthrin), 9, PGIII

**SECTION 15: REGULATORY INFORMATION**

**Labeling Requirements Under FIFRA:** 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:

**CAUTION**

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

**TSCA Inventory:** This product is exempt from TSCA inventory listing requirements as it is solely for FIFRA regulated use.

**SARA Title III Information:**

**Section 302 – Extremely hazardous substances:** None

**Section 311/312 – Hazard Categories:** Chronic (Delayed)

**Section 313 –** 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 Number	Weight %	SARA 313 – Threshold Values (lbs)
None listed			

**CERCLA –** This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Chemical Name	CAS Number	RQ	Quantity of Finished Product
None listed			

**CALIFORNIA PROPOSITION 65:**

Chemical Name	CAS Number	Prop 65 Category(ies)
Crystalline silica	14808-60-7	Cancer

## U.S. STATE RIGHT-TO-KNOW REGULATIONS:

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Bifenthrin	X		
Crystalline silica	X	X	X

## SECTION 16: OTHER INFORMATION

NFPA	Health Hazards 2	Flammability 1	Instability 0	Special Hazards – None
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