

XenTari® Biological Insecticide

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Issue Date: 05/12/00

List/Code: 12048/77782
DOT Classification: Not Regulated
EPA Registration No.: 275-104

Emergency Overview: Causes moderate eye irritation. Available information suggests that longterm exposure could cause lung fibrosis.
FPA: Health 1; Fire 1; Reactivity 0

COMPOSITION / INGREDIENTS

Ingredient Name:	<i>Bacillus thuringiensis</i> subsp. <i>aizawai</i>	Inert Ingredients*
% Concentration:	10.3%	89.7%
CAS/TECS Numbers:	N/A / N/A	N/A / N/A
OSHA-PEL 8HR TWA:	N/L	15 mg/m ³ total dust, 5 mg/m ³ respirable fraction for a major component
STEL:	N/L	N/L
Ceiling:	N/L	N/L
ACGIH-TLV 8HR TWA:	N/L	2 mg/m ³ respirable fraction for a major component
STEL:	N/L	N/L
Ceiling:	N/L	N/L
OTHER LIMITS 8HR TWA:	N/A	N/A
STEL:	N/A	N/A
Ceiling:	N/A	N/A

HEALTH CONSIDERATIONS

Route(s) of Entry:

Skin: No
Inhalation: Yes
Ingestion: No

Carcinogenicity Rating:

NTP: N/L
IARC: N/L
OSHA: N/L
ACGIH: N/L
None

Signs and Symptoms: N/D. Available information suggests direct contact with the eyes or skin may cause a mild irritation. Ingestion could result in gastrointestinal irritation, purging, fluid loss, fall in blood pressure and hypernatremia with long-term exposure producing pneumonociosis and lung fibrosis.

Medical Conditions Aggravated by Exposure: N/D. Data suggests pre-existing eye, skin, lung and metabolic/gastrointestinal ailments.

Oral Toxicity: N/D. LD50 > 5000 mg/kg in rats for another formulation of the active ingredient.

Dermal Toxicity: N/D. LD50 > 2000 mg/kg in rabbits for another formulation of the active ingredient.

Inhalation Toxicity: N/D. Another formulation of the active ingredient was not lethal in an inhalation study at a maximum achievable concentration of 3.05 mg/L.
Corrosiveness: N/D.

Dermal Irritation: N/D. Another formulation of the active ingredient was slightly irritating in a skin irritation test in rabbits.

Ocular Irritation: N/D. Another formulation of the active ingredient was slightly to moderately irritating, producing conjunctival redness, swelling and discharge in an eye irritation test in rabbits.

Dermal Sensitization: N/D.

Target Organs: Respiratory system and possibly gastrointestinal tract, eyes, skin, fetus.

Special Target Organ Effects: N/D. There was no evidence of toxicity or pathogenicity/infectivity when another formulation of the active ingredient was administered intravenously or intratracheally to rats. One major component has been reported to produce lung fibrosis in experimental animals and exposed workers.

A minor component has been reported to produce fetotoxicity and musculoskeletal abnormalities in reproductive studies in animals.

Carcinogenicity Information: N/D

EMERGENCY AND FIRST AID PROCEDURE

Eyes/Skin: Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

Ingestion/Inhalation: Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

FIRE FIGHTING PROCEDURES

Flash Point: N/D

Lower Explosive Limit (%): N/D

Upper Explosive Limit (%): N/D

Autoignition Temperature: N/D

Fire and Explosive Hazards: N/D

Extinguishing Media: Use appropriate medium for the underlying cause of the fire.

Fire Fighting Instructions: Wear protective clothing and self-contained breathing apparatus.

SAFE HANDLING, USE, STORAGE, and DISPOSAL

Handling: N/D

Storage: Reclose containers of unused XenTari. Store in a dry place inaccessible to children and out of sunlight.

Special Precautions: Wash hands and face after handling this compound.

Spill or Release Procedures: Recover product and place in an appropriate container for disposal. Ventilate and wash spill area.

Disposal: Dispose of product in accordance with federal, state, and local regulations.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Field Application: WPS USES: For those uses covered by the Worker Protection Standard (40 CFR Part 170) - in general, agricultural plant uses are covered - handlers who may be exposed to the dilute through application or other tasks must wear: long-sleeved shirt and long pants, waterproof gloves, shoes plus socks, and a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95.

In addition, handlers who may be exposed to the concentrate through mixing, loading, application or other tasks must wear: long-sleeved shirt and long pants, waterproof gloves, shoes plus socks and a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95.

NON-WPS USES: For those uses NOT covered by the Worker Protection Standard (40 CFR Part 170) - in general, agricultural plant uses are covered - mixers, loaders, and applicators must wear a dust mask when handling this product.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical State: Solid

Odor: N/D

Boiling Point: N/D

Melting/Freezing Point: N/D

Vapor Pressure (mm Hg): N/D

Vapor Density (Air=1): N/D

Evaporation Rate: N/D

Bulk Density: N/D

Specific Gravity: N/D

Solubility: N/D

pH: N/D

Viscosity: N/D

Reactivity: N/D

LEGEND

N/A = Not Applicable

N/D = Not Determined

N/L = Not Listed

L = Listed

S = Short Term

C = Ceiling

ltr = Liter

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