

Issue Date: August 2014

(Supersedes August 2009)

MATERIAL SAFETY DATA SHEET**1. IDENTIFICATION****Product Names:** [BIOCRYSTAL KURSTAKI BIOLOGICAL INSECTICIDE](#)**Product Codes:** **BIO5, BIO20****Product Use:** Biological insecticide for control of caterpillar pests in plants**Company Name:**

GREVILLIA AG PTY LTD (ABN 36 083 323 817)

Address 10 Bult Drive Brendale Queensland 4500 Australia.

Emergency Tel 24hr 0428 727 300

Tel/Fax Tel: (07) 3205 1788 Fax: (07) 3205 4327

2. HAZARD IDENTIFICATION

Classified as hazardous under NOHSC criteria.

Hazard classification - Eye irritant. Moderate Skin irritant.

Risk Phrases: Do not inhale vapour or spray mist.

Safety Phrases: Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear protective clothing, gloves and eye-face protection.

Not classified as dangerous goods under ACTDG.

Proper Shipping Name: None Allocated

3. COMPOSITION & INGREDIENTS:

Name	CAS	Proportion
<i>Bacillus thuringiensis</i> subsp. <i>Kurstaki</i> strain HD-1	Not applicable	25%
Food grade ingredients	Not applicable	25%
Other non-hazardous ingredients		to 100%

4. HEALTH EFFECTS**ACUTE****Toxicity:** This product is moderately hazardous (WHO Hazard Class II).**Swallowed:** LOW TOXICITY

LD50 > 5000 mg/Kg (rats): No rats died at 5000 mg/Kg in tests with a similar formulation

Skin: MODERATE TOXICITY

LD50 >3200 mg/Kg in rats using a similar formulation

Inhaled: LOW TOXICITY

According to limited tests with a similar formulation

Irritation:**Eye:** SLIGHT IRRITANT**Skin:** SLIGHT IRRITANT**Skin Sensitisation:** NOT A SENSITISER

(Based on tests of active ingredient on guinea pigs)

CHRONIC (Active Ingredient)

The bacterial active ingredient *Bacillus thuringiensis* is essentially non-toxic in all but specific insect targets. It has not displayed any significant toxic effects in animal testing or in actual use. Not carcinogenic

5. FIRST AID INFORMATION

In case of poisoning by any exposure route contact doctor or Poisons Information Centre. Phone 131 126.

If Swallowed: DO NOT induce vomiting. Give a glass of water.

If Eye Contact Occurs: Flush immediately with copious amounts of water.

If Skin Contact Occurs: Remove contaminated clothing and wash affected areas thoroughly with soap and water.

If Inhalation of vapour occurs: Move person to fresh air and keep at rest until recovered. Apply artificial respiration if necessary.

Doctors treat symptomatically.

6. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance: Opaque tan to brown liquid

Flashpoint (°C): >182°C

Boiling Point (°C): 100°C

Specific Gravity: 0.97

Flammability: Non-flammable

Vapour Pressure at 25°C: N/A

Behaviour in water: Disperses in water

Specific Gravity: 0.97

pH: 4.5 – 5.5

7. STABILITY

Stability: Damaged by UV light and temperatures above 35°C

8. ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

Exposure Standards: No exposure standards have been set for the components of this product.

Exposure Potential: Swallowing is unlikely under normal usage conditions. Skin uptake can occur. Inhalation of the spray mist is a possible exposure route. The product is mixed with water prior to use and this diluted form is less toxic by all exposure routes.

Re-Entry Period: Do not enter treated areas without protective clothing until spray has dried.

Engineering Controls: No special requirements. Product used outdoors. Use local ventilation if required.

Personal Protection: Will irritate eyes and skin. Avoid contact with eyes, skin and open wounds. Do not inhale spray mist. During preparation and use, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length PVC gloves and face shield or goggles. If product on skin, immediately wash area with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with

soap and water. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

Flammability: Non-flammable and non-explosive.

Storage: KEEP OUT OF REACH OF CHILDREN. Store out of sunlight in the closed, original container in a dry cool, well ventilated place. Biocrystal Kurstaki is a biological product that can be damaged by heat, so it should be protected from high temperatures at all times.

Storage temperature is crucial to the stability of this product. It is recommended that Biocrystal Kurstaki be stored at less than 25C (air conditioning). At this temperature the product stability is at least 34 months from the date of manufacture.

Spills and Disposal: Avoid eye and skin contact. Avoid contamination of waterways. Keep bystanders away. Contain spill with absorbent material such as sand. Recover product and place in appropriate container for disposal. Ventilate and wash area.

Fire/Explosion Hazard: In case of fire, use appropriate extinguishing medium for underlying cause of fire. During a fire this product may release smoke and hazardous decomposition products. Wear protective clothing and self contained breathing apparatus.

Other Information: *Bacillus thuringiensis* var. *Kurstaki* is a microbial insecticide which degrades efficiently and is practically non-toxic to birds, fish and crustaceans.

9. OTHER INFORMATION:

This material safety data sheet supersedes all previous issues.

It is the responsibility of the Purchasers of this product to ensure that all safety information and environmental information is provided to any people who may use this product.

The information contained within this safety data sheet is correct to the best of our knowledge and is provided in good faith. Grevillia Ag cannot control the conditions in which it is used so therefore each user must, prior to usage, assess and control the risks arising from their use of the material.

Contact Normal Hours: Mr. John Lever Phone: (07) 3205 1788

After Hours: Mr. John Lever Phone: 0428 727 300

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