

SDS# VBC-0078 Revision 0

ISSUED 06/10/15

[Classification according to OSHA; 29 CFR § 1910.1200, (3/12/2012)]

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

1.1 Product Identifier

MATERIAL NAME: Teknar G

Synonyms: Teknar CG **EPA Reg No.:** 73049-403 **Code Number:** 13500 & 13600 **List Number:** 13500 & 13600

Chemical Family: Not Applicable, Microbial Product

1.2 Relevant Identified Uses and Uses Advised Against

Identified Uses: Manufacture into biological larvicide

Uses Advised Against: It is a violation of Federal law to use this product in a manner inconsistent

with its FIFRA pesticide labeling.

1.3 Details of the supplier of the Safety Data Sheet

Supplied By: Valent BioSciences Corporation

870 Technology Way Libertyville, Illinois 60048

1.4 EMERGENCY TELEPHONE NUMBERS

Emergency Health or Spill:

Outside the United States: 651-632-6184 Within the United States: 877-315-9819

2. HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

Not Classified

2.2 Labeling Elements

Symbol(s)

None required

Signal Word

WARNING



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Hazard Statement(s)

None

2.3 Precautionary Statement:

Prevention

Avoid breathing dust

Wear dust mask when handling

Wash face and hands thoroughly after handling

Wear protective clothing/eye protection/impervious gloves

Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. IF ON SKIN: Wash with soap and water.

Take off contaminated clothing and wash it before reuse.

Disposal

Dispose of contents/container in accordance with local/regional/national regulations.

Safety

Avoid contact with skin and eyes

2.4 Other Hazards

None identified.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS#	Component Name	(Classification)	Percent
None	Bacillus thuringiensis subsp. israelensis strain SA3A	Not classified	1.7
Trade Secret	Trade Secret	Not classified	98.3

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

GENERAL: In all cases of doubt, seek medical attention.

EYES: Remove from source of exposure. Flush with copious amounts of water. Remove contact lenses, if present and easy to do, after the first 5 minutes, then continue rinsing. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic /supportive care as necessary.



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SKIN: Remove from source of exposure. Take off contaminated clothing. Flush with copious amounts of water. If irritation occurs or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

INGESTION: Remove from source of exposure. Move person to fresh air. Do NOT induce vomiting.

If signs of toxicity occur, seek medical attention. Provide symptomatic /supportive

care as necessary.

INHALATION: Remove from source of exposure. If signs of toxicity occur, seek medical attention.

Provide symptomatic/supportive care as necessary. If person is not breathing, call

911, then give artificial respiration.

4.2 Most important Symptoms and Effects, both Acute and Delayed Acute

May cause skin sensitization

Delayed

No information on significant adverse effects

4.3 Indication of any Immediate Medical Attention and Special Treatment Needed

Treat symptomatically and supportively

5. FIRE FIGHTING PROCEDURES

5.1 Extinguisher Media

Suitable Extinguisher Media

Dry chemical, water spray, foam or carbon dioxide. Use appropriate medium for the underlying cause of the fire.

Unsuitable Extinguisher Media

None known

5.2 Specific Hazards Arising from the Chemical

Thermal decomposition products

Carbon oxides, nitrogen oxides

5.3 Advice to Firefighters

Protective Equipment and precautions for firefighters

Fire fighter should wear full-face, self-contained breathing apparatus and impervious protective clothing. Fire fighters should avoid inhaling combustion products. See Section 8 (Exposure Controls / Personal Protection)



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Fire & Explosive hazard

Not expected to be flammable.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Use in a well-ventilated area. For respiratory protection wear a dust mask. Wear eye protection appropriate to handling activities. Wear impervious gloves. See personal protection as recommended in Section 8.

6.2 Environmental Precautions

Keep out of drains, sewers, ditches and waterways. Avoid runoff to waterways and sewers.

6.3 Methods and Materials for Containment and Cleaning Up

Ventilate area. Wear appropriate personal protective equipment. Recover product and place into appropriate container for disposal. Do not flush to sewer.

6.4 Reference to Other Sections

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations. See Section 13 for Disposal Considerations.

US Regulations may require reporting spills of hazardous materials: See Section 15: REGULATORY INFORMATION for details on reportable quantities, if any.

7. HANDLING AND STORAGE

7.1 Precautions for Safe handling

Use in a well-ventilated area. For respiratory protection wear a dust mask. Avoid contact with eyes, skin or clothing. Wash thoroughly after handling. Do not eat, drink, chew gum or smoke while working with product, obey reasonable safety precautions and practice good housekeeping.

7.2 Conditions for Safe Storage, Including Incompatibilities

Store in a cool, dry place.

Incompatibilities

None Known

7.3 Specific End Use(s)

Mosquito larvicide



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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters Component Exposure Limits

None

Derived No Effect Levels (DNELs)

No DNELs available

Predicted No Effect Concentrations (PNECs)

No PNECs available

8.2 Exposure Controls

Appropriate Engineering Controls

Provide general ventilation. Where adequate general ventilation is unavailable use local exhaust ventilation, or other engineering controls.

SKIN PROTECTION:

Wear protective clothing, including boots and gloves. Wear a dust mask. Wear gloves made of impervious material. Wash thoroughly with soap and water after handling.

EYE PROTECTION:

Wear goggles, safety glasses with side shields or full-face shield when splashing or spraying of materials is likely.

RESPIRATORY PROTECTION:

Where respiratory protection is warranted, use dust/mist filtering respirator (MSHA/NIOSH approved number prefix TC-21C or a NIOSH approved respirator with any N, P, R or HE filter. Wash thoroughly with soap and water after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

Appearance:	Brown granule	Odor:	Mild
pH:	Not Determined	Boiling Point:	Not Determined
Melting Point:	Not Applicable	Solubility (H ₂ O):	Not Determined
Specific Gravity:	Not Determined	Bulk Density:	26 ± 4 lb/cu ft
Octanol/H ₂ O Coeff:	Not Determined	Evaporation Rate:	Not Determined
Molecular Weight:	Not Applicable	Decomposition Temp.:	Not Determined
Auto Ignition:	Not Determined	LFL:	Not Determined
Flash Point:	Not Determined	UFL:	Not Determined
Vapor Density:	Not Determined	Vapor Pressure:	Not Determined
VOC:	Not Determined	Flammability Class:	Not Determined



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10. CHEMICAL STABILITY AND REACTIVITY

10.1 Reactivity

Material does not pose a significant reactivity hazard.

10.2 Chemical Stability

Stable under ordinary conditions of use and storage. Spontaneous reaction not possible.

10.3 Possibility of Hazardous Reactions

Does not undergo hazardous polymerization

10.4 Conditions to Avoid

None known

10.5 Incompatible Materials

None known

10.6 Hazardous Decomposition Products

Carbon oxides and unidentified organic compounds.

11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

LIKELY ROUTES OF EXPOSURE

Eye Contact: Yes Skin Contact: Yes Ingestion: No Inhalation: No

ACUTE EFFECTS - Toxicology Studies (Data for TGAI)

ORAL TOXICITY: $LD_{50} > 5,050$ mg/kg (rat) DERMAL TOXICITY: $LD_{50} > 5,050$ mg/kg (rabbit) INHALATION TOXICITY: $LC_{50} > 1.01 \times 10^9$ CFU/L

CORROSIVENESS: Not corrosive. DERMAL IRRITATION: Not irritating OCULAR IRRITATION: Not irritating

DERMAL SENSITIZATION: May cause skin sensitization

MUTAGENICITY INFORMATION: Components of this product are not listed as mutagens.

CARCINOGENICITY INFORMATION: Components of this product are not listed as carcinogenic by

NTP, IARC or OSHA.

DEVELOPMENTAL/REPRODUCTIVE TOXICITY: This material is not pathogenic



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SPECIAL TARGET ORGAN EFFECTS: Not known.

ASPIRATION HAZARD: Not Applicable

REPEAT DOSE STUDIES: Not Applicable, Pathogenicity Toxicity testing was all

negative

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity (Data for TGAI)

Fish: LC₅₀ >370 mg/L (96-H, Rainbow Trout)

Bird: LC₅₀ >3077 mg /kg (Acute Oral - Bobwhite Quail)

LC₅₀ >3077 mg /kg (Acute Oral – Mallard Duck)

Invertebrates: NOEC >482 mg/L (21-day) (Daphnia)

12.2 Persistence and Degradability

No data available

12.3 Bioaccumulation potential

No data available

12.4 Mobility in Soil

No data available

12.5 Results of PBT and vPvB assessment

Assessments not performed

12.6 Other adverse effects

None known

13. DISPOSAL CONSIDERATIONS

13.1 Waste Disposal Methods

Dispose of product in accordance with federal, state, provincial, and local regulations. Prevent contamination of environment by wastes.

US EPA WASTE NUMBER & DESCRIPTIONS:

There is no applicable EPA waste number. This product, if discarded, is not expected to be a characteristic or listed hazardous waste.



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14. TRANSPORTATION INFORMATION

DOT STATUS: Not regulated by US DOT

UN PROPER SHIPPING NAME: N/A RERMARKS: N/A

IATA/ICA0 STATUS: Not Regulated

PROPER SHIPPING NAME: N/A

REMARKS: N/A

IMDG STATUS: Not Regulated

PROPER SHIPPING NAME: N/A

REMARKS: N/A

15. REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations / Specific Legislation

TSCA STATUS: Exempt

CERCLA STATUS: Not regulated as hazardous

SARA STATUS: Acute: No Chronic: No Fire: No CDT: No

RCRA STATUS: Not regulated as hazardous

State Right-To-Know: Not Listed

Consult applicable national, state provincial or local laws to determine regulations, laws or

ordinances which may be applicable.

OSHA HAZARD COMMUNICATION STANDARD: Not defined by the OSHA Hazard Communication

Standard, 29 CFR

15.2 EPA Pesticide Regulations

EPA Registration Number 73049-403

EPA Pesticide Label signal word

CAUTION

Product must have EPA Approved Pesticide Label attached to or accompanying all containers.

This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions and limitations for its use.



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KEEP OUT OF REACH OF CHILDREN CAUTION

PRECAUTIONARY STATEMENTS HAZARD TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if inhaled or absorbed through the skin. Avoid breathing dust. Avoid contact with skin, eyes and clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

Mixer/loaders and applicators not in enclosed cabs or aircraft must wear a dust/mist respirator meeting NIOSH standards of at least N-95, R-95 or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

ENVIRONMENTAL HAZARDS

Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

Storage: Store in a cool, dry place.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling, if available. If recycling is not available, dispose of empty bag in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.

16. OTHER INFORMATION

NFPA Hazard Ratings HMIS Hazard Ratings

Health: 1 Health: 1 0 = Minimal Flammability: 0 Flammability: 0 1 = Slight 1 = Slight 2 = Moderate 3 = Serious

4 = Extreme



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REASON FOR ISSUE: New GHS format

APPROVAL DATE: 6/10/15 SUPERSEDES DATE: --/--/--

LEGEND: N/A = Not Applicable N/D = Not Determined

N/L = Not Listed L = Listed
C = Ceiling S = Short-term
(R) = Registered Trademark of Valent BioSciences Corp.
(TM) = Registered Trademark of Valent BioSciences Corp.

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This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABEL (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use as required by the Occupational Health and Safety Act (29 CFR 1910.1200, "Hazcom"). The product label provides information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products is regulated by the EPA under the authority of FIFRA through the product label. All necessary hazard classification and appropriate precautionary use, storage, and disposal information is set forth on that label or labeling accompanying the pesticide or to which reference is made on the label. It is a violation of federal law to use an EPA-registered pesticide product in any manner inconsistent with its labeling.



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