

PROLIANT

SDS# VBC-0876 Revision 0

ISSUED 8/30/2022

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

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY**1.1 Product Identifier****MATERIAL NAME:** PROLIANT Water Soluble Granule**Synonyms:** ---**EPA Reg No.:** 73049-1**Code Number:****List Number:****Chemical Family:** Gibberellin, naturally occurring plant growth regulators**1.2 Relevant Identified Uses and Uses Advised Against****Identified Uses:** Pesticide (Plant Growth Regulator)**Uses Advised Against:** It is a violation of Federal Law to use this product in a manner inconsistent with its Pesticide labeling.**1.3 Details of the supplier of the Safety Data Sheet****Supplied By:** Valent BioSciences LLC
1910 Innovation Way, Suite 100
Libertyville, Illinois 60048**1.4 EMERGENCY TELEPHONE NUMBERS****Emergency Health or Spill:**

Outside the United States: (01) 651-632-6184

Within the United States: 877-315-9819

2. HAZARDS IDENTIFICATION**2.1 Classification of the Substance or Mixture**

Eye Irritation, Category 2B

2.2 Labeling Elements**Symbol(s)**

None

Signal Word

WARNING

Hazard Statement(s)

Causes eye irritation

Precautionary Statement:**Prevention**

Avoid breathing dust

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Wash hands and face thoroughly after handling

Wear protective clothing/eye protection

Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/ attention.

IF ON SKIN: Wash with plenty of water.

If skin irritation or rash occurs: Get medical advice/ attention.

Take off contaminated clothing and wash it before reuse.

Disposal

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

Labeling

FIFRA EPA approved pesticide labeling required.

2.3 Other Hazards

None identified.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Component Name	Percent
77-06-5	Gibberellic Acid (GA3)	40%
Trade Secret	Other ingredients	60%

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.

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

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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, and then give artificial respiration.

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

Eye irritation

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.

Unsuitable Extinguisher Media

None known

5.2 Specific Hazards Arising from the Chemical

None known

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 protective clothing. Fire fighters should avoid inhaling combustion products. See Section 8 (Exposure Controls / Personal Protection)

Fire & Explosive hazard

Formulated product is not expected to be flammable.

6. ACCIDENTAL RELEASE MEASURES**6.1 Personal Precautions, Protective Equipment and Emergency Procedures**

Where exposure level is known, wear respirator suitable for level of exposure. Where exposure

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level is not known, wear approved, positive pressure, self-contained respirator. In addition to the 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. Do not discharge effluent containing this product into natural bodies of water.

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**

Ventilate. Avoid breathing dust. Avoid contact with eyes, skin or clothing. Wash thoroughly after handling. Do not eat, drink or smoke while working with product. Obey reasonable safety precautions and practice good housekeeping. For filling operations respiratory protection may be recommended particularly in enclosed areas.

7.2 Conditions for Safe Storage, Including Incompatibilities

Protect against physical damage. Close containers of unused material. Store in a dry, cool place.

Incompatibilities

None Known

7.3 Specific End Use(s)

Pesticide, Plant Growth Regulator.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control Parameters****Component Exposure Limits**

None established.

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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 process enclosure, local exhaust ventilation, or other engineering controls to control dust.

SKIN PROTECTION:

Wear protective clothing, including boots and gloves. Wear gloves. Wash thoroughly with soap and water after handling.

EYE PROTECTION:

Wear goggles or safety glasses with side shields when handling.

RESPIRATORY PROTECTION:

For filling operations if dust is produced respiratory protection is recommended. 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).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Color:	White granules	Odor:	Odorless
pH:	2.9% (1% solution)	Pour density:	0.53 g/mL
Tap density:	0.55 mg/L	Free acidity:	6.2% w/w as sulphuric acid
Explosive properties:	Not explosive (TGAI)	Self-ignition temperature:	Material does not self-ignite below 400 °C
Oxidizing properties:	Not oxidizing (TGAI)	Flammability Class:	Not highly flammable (TGAI)

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.

10.3 Possibility of Hazardous Reactions

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Does not undergo hazardous polymerization

10.4 Conditions to Avoid

None known.

10.5 Incompatible Materials

None

10.6 Hazardous Decomposition Products

Carbon oxides and unidentified organic compounds.

11. TOXICOLOGICAL INFORMATION**11.1 Information on Toxicological Effects**Likely Routes of Exposure

Inhalation: Yes

Eye Contact: Yes

Skin Contact: Yes

Ingestion: No

Product (or TGAI, as noted) ToxicologyAcute EffectsOral Toxicity: LD₅₀ > 5,000 mg/kg bw (rat)Dermal Toxicity: LD₅₀ > 5,000 mg/kg bw (rat) [Limit Test]Inhalation Toxicity: LC₅₀ > 2.269 mg/L air (rat) [Limit Test]

Corrosiveness: Not corrosive.

Dermal Irritation: Slightly irritating. All dermal irritation cleared within 48 hrs (rabbit)

Ocular Irritation: Mildly irritating. All ocular irritation cleared within 72 hrs (rabbit)

Dermal Sensitization: Not a sensitizer [Magnusson-Kligman method] (guinea pig)

Mutagenicity Information: Components of this product are not listed as mutagens. Negative in chromosomal aberration, sister chromatid exchange in CHO. Did NOT induce Unscheduled DNA synthesis (UDS) in Rat hepatocytes in vivo (2000 mg/kg ;limit dose). Negative in E-coli reverse mutation AMES test, 10,000 mcg/dish. [TGAI]

Carcinogenicity Information: Components of this product are not listed as carcinogenic by NTP, IARC or OSHA.

Developmental / Reproductive Toxicity: This material is not a teratogenic compound.

Special Target Organ: None identified

Aspiration Hazard: Not Applicable

Repeat Dose Studies: Not Applicable, Acute toxicity testing was all negative.

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12. ECOLOGICAL INFORMATION**12.1 Ecotoxicity of the Mixture**

- Fish: LC₅₀ >100 mg a.i./L (96-H, *Cyprinus carpio*)
Bird: LC₅₀ > 5,000 mg a.i./kg bw (Acute Oral – Pigeon)
LC₅₀ > 5,000 mg a.i./kg bw (Acute Oral – Chicken)
Invertebrates: EC₅₀ > 140 mg a.i./L (48-H, Daphnia), NOEC 140 mg/L (48-H, Daphnia)
Bees (insect): LD₅₀ > 285.05 µg a.i./bee (24-H, 48-H) (Oral toxicity, honey bee)
LD₅₀ > 250.00 µg a.i./bee (24-H, 48-H) (Contact toxicity, honey bee)
Algae: Cell density EC₅₀ > 92 mg/L (72-H, Freshwater alga)
Growth rate E_rC₅₀ > 92 mg/L (72-H, Freshwater alga)
Area under the growth curve E_bC₅₀ > 92 mg/L (72-H, Freshwater alga)

12.2 Persistence and Degradability

Active ingredient is naturally occurring plant growth regulator. Active ingredient does not undergo aqueous photo-degradation. Active ingredient is not considered readily biodegradable.

12.3 Bioaccumulation potential

No data available. Bio-concentration Factor (BCF): Given that the log P_{ow} for the active ingredient (0.45) is much less than 3, there is no potential for bio-concentration in fatty tissues and no potential for aquatic bio-magnification.

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 INFORMATIONDOT STATUS: Not Regulated as Hazardous by DOTIATA/ICA0 STATUS: Not RegulatedIMO STATUS: Not Regulated**15. REGULATORY INFORMATION****15.1 Safety, Health and Environmental Regulations / Specific Legislation**

TSCA STATUS: N/L

CERCLA STATUS: Not regulated as hazardous

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

RCRA STATUS: Not regulated as hazardous

State Right-To-Know: 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: 73049-1

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.

KEEP OUT OF REACH OF CHILDREN

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CAUTION**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS & DOMESTIC ANIMALS**

Caution: Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Waterproof gloves.
- Shoes plus socks.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE 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.

ENVIRONMENTAL HAZARDS

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning or disposing of equipment washwaters or rinsate.

Do not use treated seed for food, feed, or oil purposes. Exposed treated seed may be hazardous to birds and other wildlife. Treat only those seeds needed for immediate use and planting. Do not store excess treated seed beyond planting time. Dispose of all excess treated seed and seed packaging by burial away from bodies of water.

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DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribe agency responsible for pesticide regulation.

GENERAL DIRECTIONS FOR USE

Use only as directed. Read the label thoroughly and make sure it is understood before making applications. Keep out of reach of children.

STORAGE AND DISPOSAL

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

Pesticide Storage

Keep containers tightly closed when not in use.

Pesticide Disposal

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

Container Disposal: (80 or 320 grams bottles)

Non-refillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty remaining contents into application equipment or mix tank. Fill container ¼ full with water and recap. Shake 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times. Then offer for recycling or dispose of in a sanitary landfill, or incineration, if allowed by state and local authorities by burning. If burned, stay out of smoke.

(2.5 grams sachets)

Non-refillable container. Do not reuse or refill this container. Offer for reconditioning if appropriate or dispose of in a sanitary landfill, or incineration, if allowed by state and local authorities by burning. If burned, stay out of smoke.

16. OTHER INFORMATION**NFPA Hazard Ratings**

Health: 0
Flammability: 0
Instability: 0

HMIS Hazard Ratings

Health: 0
Flammability: 0
Instability: 0

0 = minimal
1 = slight
2 = moderate
3 = serious
4 = Extreme

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REASONS FOR ISSUE: New Product

APPROVAL DATE: 08/30/2022

SUPERSEDES DATE: --

LEGEND: N/A = Not Applicable

N/L = Not Listed

C = Ceiling

(R) = Registered Trademark of Valent BioSciences

(TM) = Registered Trademark of Valent BioSciences

N/D = Not Determined

L = Listed

S = Short-term

The information provided in this Safety Data Sheet (SDS) is provided in good faith and believed to be accurate at the time of preparation of the SDS. However, to the extent consistent with applicable law, Valent BioSciences LLC and its subsidiaries or affiliates extend no warranties, make no representations, and assume no responsibility as to the accuracy, suitability, or completeness of such information. Additionally, to the extent consistent with applicable law, neither Valent BioSciences LLC nor any of its subsidiaries or affiliates represents or guarantees that this information or product may be used without infringing the intellectual property rights of others. Except to the extent a particular use and particular information are expressly stated on the product label, it is the users' own responsibility to determine the suitability of this information for their own particular use of this product. If necessary, contact Valent BioSciences LLC to confirm that you have the most current product label and SDS.

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.