

ProVide 10 SG Plant Growth Regulator Water Soluble Granule

SDS# VBC-0105 Revision 5

ISSUED 01/22/2020

[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:** ProVide 10 SG Plant Growth Regulator Water Soluble Granule**Synonyms:** Regulex 10 SG, VBC-30011**EPA Reg No.:** 73049-409**Code Number:** 70905**List Number:** 05610**Chemical Family:** Gibberellins, 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 FIFRA 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**

Not Classified

2.2 Labeling Elements**Symbol(s)**

None

Signal Word

WARNING

Hazard Statement(s)

None

ProVide 10 SG Plant Growth Regulator Water Soluble Granule

SDS# VBC-0105 Revision 5

ISSUED 01/22/2020

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

Precautionary Statement:**Prevention**

- Avoid breathing dust.
- Avoid contact with skin, eyes or clothing.
- Wash hands and face thoroughly after handling.
- Wear protective clothing/eye protection/face 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.

Disposal

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

2.3 Other Hazards

None identified.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Active Ingredient - Name	Percent
468-44-0	Gibberellin A4	10.0
510-75-8	Gibberellin A7	
Trade Secret	Trade Secret	90.0

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.

ProVide 10 SG Plant Growth Regulator Water Soluble Granule

SDS# VBC-0105 Revision 5

ISSUED 01/22/2020

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

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.

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**

Minimally irritating to the eye and slight irritation to the skin

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

Not flammable.

ProVide 10 SG Plant Growth Regulator Water Soluble Granule

SDS# VBC-0105 Revision 5

ISSUED 01/22/2020

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

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

For respiratory protection wear a dust mask. Wear eye protection appropriate to handling activities. Wear gloves. See personal protection as recommended in Section 8.

6.2 Environmental Precautions

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 by cleaning of equipment or disposal of equipment washwaters.

6.3 Methods and Materials for Containment and Cleaning Up

Ventilate area. Wear appropriate personal protective equipment. Recover product with inert material (earth, sand, vermiculite), place into appropriate container for disposal.

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**

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 and 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)

Plant Growth Regulator product.

ProVide 10 SG Plant Growth Regulator Water Soluble Granule

SDS# VBC-0105 Revision 5

ISSUED 01/22/2020

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Component Exposure Limits

None Established

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 control 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, safety glasses with side shields when handling.

RESPIRATORY PROTECTION:

Where 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:	White granular pellet	Odor:	Very mild, sweet, fruity estery odor
pH:	3.6 (1% sol'n)	Odor Threshold:	Not determined
Melting Point:	Not determined	Initial Boiling Point & Range:	Not determined
Flash Point:	Not determined	Solubility (H ₂ O):	Not determined
Density:	0.551 g/mL	Evaporation Rate:	Not determined
Octanol/H ₂ O Coeff:	Not determined	Decomposition Temp.:	Not determined
Auto Ignition:	Not determined	Vapor Pressure:	Not determined
Vapor Density:	Not determined	Flammability:	Not determined
Kinematic Viscosity:	Not determined		

ProVide 10 SG Plant Growth Regulator Water Soluble Granule

SDS# VBC-0105 Revision 5

ISSUED 01/22/2020

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

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

Does not undergo hazardous polymerization.

10.4 Conditions to Avoid

None known.

10.5 Incompatible Materials

None. No chemical incompatibility with ammonium dihydrogen orthophosphate, potassium permanganate, zinc and water.

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:	Not likely

Product (or TGA) as noted) Toxicology:Acute Effects

Oral Toxicity:	LD ₅₀ > 5,000 mg/kg bw (rat)
Dermal Toxicity:	LD ₅₀ > 5,000 mg/kg bw (rabbit)
Inhalation Toxicity:	LD ₅₀ > 5.25 mg/l (rat)
Dermal Irritation:	Slightly irritating (rabbit)
Ocular Irritation:	Minimally irritating, all ocular irritation cleared within 48 hrs (rabbit)
Dermal Sensitization:	Not a skin sensitizer (Magnusson and Kligman test, guinea pig)
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 a teratogenic compound.

ProVide 10 SG Plant Growth Regulator Water Soluble Granule

SDS# VBC-0105 Revision 5

ISSUED 01/22/2020

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

Special Target Organ: None
Aspiration Hazard: Not Applicable
Repeat Dose Studies: Not Applicable

12. ECOLOGICAL INFORMATION**12.1 Ecotoxicity (Data From TGAI)**

Fish: LC₅₀ >96 mg/L (96-H, Rainbow trout)
Bird: LC₅₀ >2,250 mg/L (Acute Oral, Northern bobwhite)
Aquatic Invertebrates: EC₅₀ >97 mg/L (48-H) (Water flea)
Bees (insects): LD₅₀ >100 µg/bee (contact, honey bee)
LD₅₀ >100 µg/bee (acute, honey bee)
Earthworm: LC₅₀ >1,250 mg/kg dry soil (*Eisenia fetida*)
Algae: No adverse effect on algae growth, NOEC > 100 mg/L (*Pseudokirchneriella subcapitata*)

12.2 Persistence and Degradability

Product is readily biodegradable.

Direct aqueous photolysis is not a significant degradation pathway (<20% direct photolysis in 30 days).

12.3 Bioaccumulation potential

No data available. Bioconcentration factor (BCF): The log P_{ow} for GA4 is 1.76; the log P_{ow} for GA7 is 1.55. These values are less than 3; therefore 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.

ProVide 10 SG Plant Growth Regulator Water Soluble Granule**SDS# VBC-0105 Revision 5**

ISSUED 01/22/2020

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

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.

14. TRANSPORTATION INFORMATION

DOT STATUS: Not regulated as hazardous by DOT
UN PROPER SHIPPING NAME: N/A
REMARKS: N/A

IATA/ICAO 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: Not Listed
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 FIFRA – Pesticide Labeling

EPA registration Number: 73049-409
EPA Pesticide Label signal word: CAUTION

Product must have EPA Approved Pesticide Label attached 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.

ProVide 10 SG Plant Growth Regulator Water Soluble Granule**SDS# VBC-0105 Revision 5**

ISSUED 01/22/2020

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

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

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing.

ENVIRONMENTAL HAZARDS

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 by cleaning of equipment or disposal of equipment washwaters.

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.

PESTICIDE STORAGE: Store below 77°F (25°C). Keep containers tightly closed when not in use.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of onsite or at an approved waste disposal facility.

CONTAINER DISPOSAL: Nonrefillable 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 1/4 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.

16. OTHER INFORMATION**NFPA Hazard Ratings**

Health: N/D
Flammability: N/D
Instability: N/D

HMIS Hazard Ratings

Health: N/D
Flammability: N/D
Instability: N/D

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

REASON FOR ISSUE: Address Change

APPROVAL DATE: 01/22/2020

SUPERSEDES DATE: 04/12/2019

ProVide 10 SG Plant Growth Regulator Water Soluble Granule

SDS# VBC-0105 Revision 5

ISSUED 01/22/2020

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

LEGEND: N/A = Not Applicable
N/L = Not Listed
C = Ceiling
(R) = Registered Trademark of Valent BioSciences LLC
(TM) = Registered Trademark of Valent BioSciences LLC

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.