

## ProGibb® LV Plus Plant Growth Regulator Solution

SDS# VBC-0008 Revision 1

ISSUED 05/04/15

[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:** ProGibb® LV Plus Plant Growth Regulator Solution**Synonyms:** ProGibb® LV Plus T&O Plant Growth Regulator Solution**EPA Reg No.:** 73049-498**Code Number:** N/A**List Number:** 36611**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 Corporation  
870 Technology Way  
Libertyville, Illinois 60048**Manufactured By:** Valent BioSciences Corporation  
870 Technology Way  
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

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**Hazard Statement(s)**

None

**Precautionary Statement:**

**Prevention**

- Avoid breathing vapors/spray.
- Wash 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.
- Take off contaminated clothing and wash it before reuse.

**Disposal**

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

**Labeling**

EPA Approved Pesticide Labeling required

**2.3 Other Hazards**

None identified

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

CAS #	Active Ingredients - Name	Percent
77-06-5	Gibberellic acid (GA3)	5.7%

CAS #	Component Other-Ingredient Name	Percent
Trade Secret	Other ingredients	94.3%

**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

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care as necessary.

**SKIN:** Remove from source of exposure. Take off contaminated clothing. Flush with copious amounts of water. 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.

**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**

Mildly irritating to the eyes

**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 impervious protective clothing. Fire fighters should avoid inhaling combustion products. See Section 8 (Exposure

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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**

For respiratory protection wear a dust mask. Wear eye protection appropriate to handling activities. Wear impervious gloves. 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.

**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. 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**

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. Keep away from heat or open flame.

**Incompatibilities**

None known

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**7.3 Specific End Use(s)**

Pesticide, Plant Growth Regulator.

**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 controls

**SKIN PROTECTION:**

Wear impervious protective clothing, including boots and gloves. For filling operations respiratory protection is recommended. Wear gloves made impervious materials. 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:**

Use 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/Color:	Clear colorless liquid	pH:	3.3 (1% w/v dilution)
Relative density:	1.14	Dilution stability:	Solutions stable for 18 hrs
Persistent foaming (after 1 min):	53 mL (2.27% w/v) 53 mL (4.55% w/v)	Free acidity:	0.87% w/w (as sulphuric acid)
Viscosity:	Kinematic (at 20 °C) 86	Explosive properties:	Not explosive (TGA)

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	$\text{mm}^2 \cdot \text{s}^{-1}$ Kinematic (at 40 °C) 31 $\text{mm}^2 \cdot \text{s}^{-1}$ Dynamic (at 20 °C) 98 mPa·s Dynamic (at 40 °C) 36 mPa·s		
Flammability:	Not highly flammable (TGAI)	Oxidizing properties:	Not oxidizing (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. 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.

**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: No
- Eye Contact: Yes
- Skin Contact: Yes
- Ingestion: No

Product (or TGAI as noted) Toxicology

Acute Effects

- Oral Toxicity:  $\text{LD}_{50} > 5,000 \text{ mg/kg bw (rat) [Limit test]}$
- Dermal Toxicity:  $\text{LD}_{50} > 5,050 \text{ mg/kg bw (rat) [Limit test]}$

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Inhalation Toxicity: LC<sub>50</sub> > 5.16 mg/L air (rat)  
Corrosiveness: Not corrosive (rabbit)  
Dermal Irritation: No dermal irritation (rabbit)  
Ocular Irritation: Minimally irritating, cleared by 24 hrs (rabbit)  
Dermal Sensitization: Not a sensitizer (guinea pig)

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

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.

**12. ECOLOGICAL INFORMATION****12.1 Ecotoxicity**

This product has not been tested for ecotoxicological effects. Test results for the Technical Grade Active Ingredient [TGAI] are given below.

Fish: LC<sub>50</sub> > 150 mg a.i./L (96-H, Rainbow trout) [TGAI Limit test]  
Bird: LC<sub>50</sub> > 2,250 mg a.i./kg bw (Acute Oral - Bobwhite Quail) [TGAI limit test]  
Bird: LC<sub>50</sub> > 6,018 mg a.i./kg bw (Feeding - Bobwhite Quail) [TGAI]  
Aquatic Invertebrates: EC<sub>50</sub> > 488 mg a.i./L (48-H), No mortality level 360 mg/L (Daphnia)  
Bees (Insects): LC<sub>50</sub> > 25 µg a.i./bee (48-H), NOED 25 µg a.i./bee (acute contact)  
Earthworm: LC<sub>50</sub> > 1,111 mg a.i./kg dry soil (Eisenia foetida), 14-D acute toxicity)  
Algae: Not tested. TGAI is naturally occurring plant growth regulator.

**12.2 Persistence and Degradability**

Active ingredient is naturally occurring plant growth regulator that has been shown in publications to be present in all plants. Active ingredient is not considered readily biodegradable and does not undergo aqueous photo-degradation.

**12.3 Bioaccumulation potential**

Bio-concentration Factor (BCF): Given that the log P<sub>OW</sub> for the active ingredient (0.45) is much

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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.

**14. TRANSPORTATION INFORMATION**DOT

STATUS: Not Regulated as Hazardous by DOT

IATA/ICAO

STATUS: Not Regulated

IMO

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



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OSHA HAZARD COMMUNICATION STANDARD: Not defined by the OSHA Hazard Communication Standard, 29 CFR.

State Right-To-Know: Not listed.

Consult applicable national, state provincial or local laws to determine regulations, laws or ordinances which may be applicable.

## 15.2 EPA Pesticide Regulations

EPA Registration Number: 73049-498

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  
CAUTION**

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION**

## 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 when disposing of equipment washwaters or rinsate.

## 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 Tribal agency responsible for pesticide regulation.

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**STORAGE AND DISPOSAL**

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

**Pesticide Storage:** Store in a cool, dry place. Keep containers tightly closed when not in use. Keep away from heat and open flame.

**Pesticide Disposal:** To avoid wastes, use all material in this container by application according to label directions. If wastes can not be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

**Container Disposal:** Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of 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:	1	Flammability:	1	1 = slight
Instability:	0	Instability:	0	2 = moderate
				3 = serious
				4 = Extreme

REASON FOR ISSUE: Updating Toxicology, Ecotoxicology, Biodegradability.

APPROVAL DATE: 05/04/15

SUPERSEDES DATE: 07/16/2014

LEGEND: N/A = Not Applicable

N/D = Not Determined

N/L = Not Listed

L = Listed

C = Ceiling

S = Short-term

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## SAFETY DATA SHEET

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