



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Biopesticides and Pollution Prevention Division (7511P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

71840-31

Date of Issuance:

5/23/2018

NOTICE OF PESTICIDE:

Registration
 Reregistration
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

Vault IP

Name and Address of Registrant (include ZIP Code):

BASF Corporation
26 Davis Drive
Research Triangle Park, NC 27709

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product, always refer to the above EPA Registration Number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA or the Act).

Registration is in no way to be construed as an endorsement or recommendation of this product by the U.S. Environmental Protection Agency (EPA). In order to protect health and the environment, the Administrator, on his or her motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under the Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration or registration review of your product when the EPA requires all registrants of similar products to submit such data.

Signature of Approving Official:

Jeannine Kausch, Product Manager 92
Microbial Pesticides Branch
Biopesticides and Pollution Prevention Division (7511P)
Office of Pesticide Programs

Date:

5/23/2018

2. Submit storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) data as these data requirements are not satisfied. A study is required to satisfy these data requirements. You have 18 months from the date of this registration to provide these data to the EPA.
3. Make the following labeling change before you release this product for shipment:
 - Revise the EPA Registration Number to read, “EPA Reg. No. 71840-31.”
4. Submit one (1) copy of the final printed labeling for the record before you release this product for shipment.

Should you wish to add/retain a reference to your company’s website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains statements or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 registration, the website will be referred to the EPA’s Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6. A stamped copy of the labeling is enclosed for your records. Please also note that the record for this product currently contains the following acceptable Confidential Statement of Formula (CSF):

- Basic CSF dated 05/10/2018

Any CSFs other than that listed above are superseded.

If you have any questions, please contact Cody Kendrick by phone at (703) 347-0468 or via email at kendrick.cody@epa.gov.

Sincerely,



Jeannine Kausch, Product Manager 92
Microbial Pesticides Branch
Biopesticides and Pollution
Prevention Division (7511P)
Office of Pesticide Programs

Enclosure



We create chemistry [Carton Text]

ACCEPTED

05/23/2018

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 71840-31

Group 44 Fungicide

Vault® IP

{Alternate brand name: Vault® IP Plus}

{Optional Descriptor: Velondis™ Brand Biofungicide; Biofungicide/Inoculant Seed Treatment}

For commercial and on-farm use

Seed treatment for disease suppression in and liquid inoculant for soybeans

Active Ingredients: (Component A)

Bacillus subtilis strain BU1814* 1.706%

Bacillus amyloliquefaciens strain MBI 600** 3.132%

Other Ingredients: 95.162%

Total: 100.000%

*Component A contains a minimum of 1.4×10^9 colony forming units per mL

**Component A contains a minimum of 1.4×10^{10} colony forming units per mL

Contains nonplant food ingredients

Soil Amending Guaranteed Analysis

Ingredient: (Component B)

*Bradyrhizobium japonicum**** 100.000%

Total: 100.000%

***Component B contains a minimum of 1.0×10^{10} colony forming units per mL

EPA Reg. No. 71840-GR

EPA Est. No.

KEEP OUT OF REACH OF CHILDREN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See booklet for complete **First Aid, Precautionary Statements, Directions For Use,** and **Conditions of Sale and Warranty.**

You may contact BASF Corporation for emergency medical treatment information at 1-800-832-HELP (4357).

Net Contents: ___ x ___ fl oz {qt} Component A of Vault IP
___ x ___ qt {gal} Component B of Vault IP

Batch Code: [Located on physical container]

BASF Corporation

26 Davis Drive, Research Triangle Park, NC 27709

Not for sale or use after [date stamped is 6 months after the date of manufacture]



We create chemistry

[Booklet/Base Label attached to Component A]

Component A of Vault® IP

{Alternate brand name: Vault® IP Plus}

{Optional Descriptor: Velondis™ Brand Biofungicide; Biofungicide Seed Treatment Used With A Rhizobial Inoculant}

For commercial and on-farm use

Seed treatment for disease suppression in and used with a liquid inoculant for soybeans

Active Ingredients: (Component A)

Bacillus subtilis strain BU1814* 1.706%

Bacillus amyloliquefaciens strain MBI 600** 3.132%

Other Ingredients: 95.162%

Total: 100.000%

*Component A contains a minimum of 1.4 x 10⁹ colony forming units per mL

**Component A contains a minimum of 1.4 x 10¹⁰ colony forming units per mL

EPA Reg. No. 71840-GR

EPA Est. No.

KEEP OUT OF REACH OF CHILDREN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See booklet for complete **First Aid, Precautionary Statements, Directions For Use,** and **Conditions of Sale and Warranty.**

You may contact BASF Corporation for emergency medical treatment information at 1-800-832-HELP (4357).

Net Contents: ___ x ___ fl oz **Component A of Vault IP**

Batch Code: [Located on physical container]

BASF Corporation

26 Davis Drive, Research Triangle Park, NC 27709

Not for sale or use after [date stamped is 6 months after the date of manufacture]

First Aid

Hotline Number

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact BASF Corporation for emergency medical treatment information at 1-800-832-HELP (4357).

Precautionary Statements

below the mean high-water mark. **DO NOT** contaminate water when disposing of equipment washwater or rinsate.

Personal Protective Equipment (PPE)

The PPE requirements below apply to both Worker Protection Standard (WPS) uses (in general, agricultural-plant uses are covered by the Worker Protection Standard (40 CFR Part 170)) and Non-WPS uses.

Applicators and other handlers must wear:

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

Mixers/loaders and applicators must wear a NIOSH-approved particulate respirator with any N, R, or P filter with NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

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.

ENGINEERING CONTROLS

When handlers use closed systems in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

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

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.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of **4 hours**.

Exception: If the treated seeds are planted in the soil, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water) is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep unprotected persons out of treatment area until seeds have dried or been packaged.

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal.

Pesticide Storage

Ensure container closures are tight. Store in a cool, dry place.

Pesticide Disposal

To avoid wastes, use all material in this container by application according to label directions. If wastes cannot 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 Handling

Nonrefillable 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. Add water - at least 2% of the container volume, and up to 1/3 of the volume of water needed to make the proper slurry composition with a maximum of 1/4 of the container volume, and recap. Shake for 30 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. If used in application equipment, adjust the slurry volume application rate to account for any added rinsate water. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer or contact the Ag Container Recycling Council at 1-877-952-2272 or www.acrecycle.org. Alternatively, puncture and dispose of in a sanitary landfill or by incineration. **DO NOT** burn, unless allowed by state and local ordinances. If burned, stay out of smoke. Follow the same procedures as above for the plastic bladders containing only the rhizobial inoculant. Regarding the carton, offer for recycling if available or dispose of it in a sanitary landfill.

In Case of Emergency

In case of large-scale spill of this product, call:

- CHEMTREC 1-800-424-9300
- BASF Corporation 1-800-832-HELP (4357)

In case of medical emergency regarding this product, call:

- Your local doctor for immediate treatment
- Your local poison control center (hospital)
- BASF Corporation 1-800-832-HELP (4357)

Product Information

Vault® IP contains two components in separate containers: **Component A** and **Component B**.

Component A consists of:

- Two biofungicide active ingredients, *Bacillus subtilis* strain BU1814 and *Bacillus amyloliquefaciens* strain MBI 600

Bacillus subtilis strain BU1814 rapidly colonizes germinating seeds and the developing root system. The same bacteria quickly produce a beneficial biofilm and antimicrobial components promoting Induced Systemic Resistance (ISR) within the plant. This results in suppression of disease organisms that attack such root systems (e.g., *Fusarium* spp. and *Rhizoctonia solani*).

Bacillus amyloliquefaciens strain MBI 600 initially colonizes germinating seeds. The same bacteria then colonize the developing root systems of plants and suppress disease organisms that attack such root systems (e.g., *Fusarium* spp., *Rhizoctonia* spp., and, under some conditions, *Pythium ultimum*).

Component B consists of:

- *Bradyrhizobium japonicum* – an on-seed inoculant product that delivers a high concentration of beneficial rhizobia bacteria to the soybean plant.

When combined as **Vault IP**, the differential modes of action of the two biological actives with the rhizobial inoculant can contribute to complementary activity with certain chemical seed treatments, resulting in increased and more uniform field performance. Both biofungicide active components grow along the developing root system, and can extend the window of disease protection longer into the growing season. The plants produce a more vigorous root system, which often results in more uniform stands, overall improved plant growth and greater yield potential.

Label statement required by the State of Oregon

Information regarding the contents and levels of metals in this product is available on the Internet at <http://www.aapfco.org/metals.html>

Application Instructions

Vault IP can be used in commercial seed treatment facilities and on-farm. **DO NOT** use for applications at hopper box and planter box. For use with commercial treatment application equipment only.

Mixing Instructions: Apply **Vault IP** as a water-based slurry alone or with other seed treatment products (fungicides, insecticides, nematicides, fertilizers, and rhizobial inoculants). **DO NOT** mix **Vault IP** with any copper-based products. For specific use rate information, see the **Standard Mixing and Application Rate Information** table.

Prior to mixing, determine physical compatibility by mixing proportional quantities of the products in water. **DO NOT** mix **Vault IP** with any other seed treatment product that bears a label prohibition against such mixing. When tank mixing **Vault IP** with any other seed treatment product, observe the most restrictive of the

labeling limitations and precautions of all products used in mixtures.

ATTENTION: Use only cool, chlorine-free water in the tank mix. If one or more treatments are not physically compatible (harmful), mix those products in, and apply them from a separate mix tank.

When applying **Vault® IP** as a stand-alone treatment, addition of water is needed to obtain the desired application rate of 5.0 fl oz / CWT of seed. See **Standard Mixing and Application Rate Information** table for more details.

When tank mixing **Vault IP** with other additional seed treatments, the total liquid volume of all treatments being applied to the seed is typically equal to or greater than, 5.0 fl oz per CWT of seed. No additional water is needed for these tank mixes. If, however, the total liquid volume is less than 5.0 fl oz / CWT, a sufficient amount of water is needed to attain a minimum application rate of 5.0 fl oz / CWT.

To mix, first add the other seed treatment product(s) to the mix tank with approximately ½ of the required water. Slowly add **Vault IP Component A and B** to the slurry until a uniform suspension is obtained. Add the remainder of the water while maintaining constant agitation. **DO NOT** store mixed slurries for longer than 24 hours.

Some ingredients in **Vault IP** may not completely solubilize; therefore, it is important to maintain a uniform suspension by continuously agitating the solution throughout the application process. **DO NOT** exceed label application dosage rates.

Some seed treatment formulations can be harmful to the rhizobia in **Vault IP**. Please consult your distributor, BASF representative, or the BASF website before applying this product with any other seed treatment product. Please observe the planting window recommendations of individual treatments for optimal product responses.

For maximum on-seed survival and viability of rhizobia, mix and apply **Vault IP** Biofungicide and Rhizobial Inoculant components in a tank separate from any other seed treatment products.

Standard Mixing and Application Rate Information

Pounds of Soybean Seed to Treat	Amount of Component A - Biofungicide	Amount of Component B - Rhizobial Inoculant	Amount of Cool, Non-Chlorinated Water	Final Application Rate (fl oz slurry / CWT)	Final Application Rate (fl oz slurry / 140K seed count)
When Applying Vault IP with Other Additional Seed Treatments*					
10,000	10.0 fl oz (one bottle)	100 fl oz (one bladder)	0	1.1 fl oz / CWT***	0.51 fl oz per 140K seed count unit***
5,000	5.0 fl oz (one bottle)	50 fl oz (one bladder)	0	1.1 fl oz / CWT***	0.51 fl oz per 140K seed count unit***
When Applying Vault IP as a Stand-alone Treatment**					
10,000	10.0 fl oz (one bottle)	100 fl oz (one bladder)	390 fl oz	5.0 fl oz / CWT***	2.32 fl oz per 140K seed count unit***
5,000	5.0 fl oz (one bottle)	50 fl oz (one bladder)	195 fl oz	5.0 fl oz / CWT***	2.32 fl oz per 140K seed count unit***

NOTE – If TOTAL application volume of all seed treatments being applied to the seed (including Vault IP Plus volume of 1.1 fl oz/CWT) is less than 5.0 fl oz/CWT, add sufficient volume of non-chlorinated water to the Vault IP Plus to achieve a TOTAL application volume of at least 5.0 fl oz/CWT in order to ensure uniform seed coverage.

* When total liquid volume of all treatments being applied to the seed is equal to or greater than 5.0 fl oz per 100 lbs of seed, **DO NOT** add any water to the **Vault IP** mixture.

** When applying **Vault IP** without additional seed treatments, it is required to add non-chlorinated water to attain a total liquid application rate of 5.0 fl oz per 100 lbs of seed.

*** At average 3,000 seeds per pound

Conditions of Sale and Warranty

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as the presence of other or untested or unapproved materials, seed of low quality or low vigor or low germination, use of the product in a manner inconsistent with its labeling, misapplication of this product, or weather conditions at planting or environmental conditions during seed storage, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S EXCLUSIVE REMEDY AND BASF'S EXCLUSIVE LIABILITY, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF THIS PRODUCT.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, EXEMPLARY, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing **Conditions of Sale and Warranty** that may be varied only by agreement in writing signed by a duly authorized representative of BASF.

Vault is a registered trademark of BASF.
{*Velondis* is a trademark of BASF.}

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BASF Corporation
26 Davis Drive
Research Triangle Park, NC 27709


We create chemistry



We create chemistry

[Text printed on bladder of Component B. Text is limited due to limitations in inkjet technology]

Component B of Vault[®] IP

{Alternate brand name: Vault[®] IP Plus}

EPA Reg. No. 71840-GR

[Batch Code: Located on physical container]