

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

December 20, 2022

Patricia Flis Product Registration Manager, Agricultural Solutions BASF Corporation 26 Davis Drive, Research Triangle Park North Carolina 27709

Subject: Pesticide Registration Improvement Act (PRIA) Labeling Amendment – to add in-furrow uses to the label Product Name: Velondis Plus EPA Registration Number: 71840-26 EPA Receipt Date: 03/16/2022 Action Case Number: 00346978

Dear Ms. Flis:

The amended labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable under FIFRA section 3(c)(5).

You must submit and/or cite all data required for registration or registration review of your product when the U.S. Environmental Protection Agency (EPA) requires all registrants of similar products to submit such data.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

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 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 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 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 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.

Page 2 of 2 EPA Reg. No. 71840-26 Action Case No. 00346978

If you have any questions, please contact Andrew Queen by phone at 202-566-1539 or via email at queen.andrew@epa.gov.

Sincerely,



Digitally signed by CODY KENDRICK

Cody Kendrick, Senior Regulatory Advisor Microbial Pesticides Branch **Biopesticides and Pollution** Prevention Division (7511M) Office of Pesticide Programs

Enclosure



# ACCEPTED

Dec 20, 2022

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 71840-26

# Velondis<sup>™</sup> Plus

{Optional Descriptor: **Biofungicide**}

# For commercial and on-farm use

# In-furrow or seed treatment for disease suppression in selected crops

#### **Active Ingredients:**

EPA Reg. No. 71840-26

Bacillus subtilis strain BU1814*	. 1.706%
Bacillus amyloliquefaciens strain MBI 600**	. 3.132%
Other Ingredients:	. <u>95.162%</u>
Total:	. 100.000%
* Contains a minimum of $1.4 \times 10^9$ colony forming units per mL	

\*\* Contains a minimum of 1.4 x 10<sup>10</sup> colony forming units per mL

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 inside 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:**

# **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**

# Personal Protective Equipment (PPE)

The PPE requirements below apply to both Worker Protection Standard (WPS) uses (in general, agriculturalplant 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 NIOSHapproved particulate respirator with any N, R, or P filter with NIOSH-approval number prefix TC-84A; or a NIOSHapproved 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 or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.607(d) and (e)], 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**

{Environmental hazards statements for container sizes less than 5 gallons.}

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 disposing of equipment washwater or rinsate.

{Environmental hazards statements for containers greater than or equal to 5 gallons.}

**DO NOT** discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. **DO NOT** discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

# **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 12 hours.

**Exception:** If the product is soil-injected or soil incorporated, 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 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). STORAGE AND DISPOSAL (continued)

#### Container Handling

{For containers with capacities less than or equal to 5 gallons}

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.

{For containers with capacities greater than 5 gallons}

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. 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. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 60 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. 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.

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## In Case of Emergency

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

• CHEMTREC	1-800-424-9300
<ul> <li>BASF Corporation</li> </ul>	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**

#### Velondis<sup>™</sup> Plus biofungicide is a product that includes:

• Biofungicide active ingredient, *Bacillus subtilis* strain BU1814, that inhibits seedling and root pathogens, such as *Fusarium* spp., *Rhizoctonia solani*, and *Bipolaris sorokiniana* 

*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., *Rhizoctonia solani*, and *Bipolaris sorokiniana*).

• Biofungicide active ingredient, *Bacillus amyloliquefaciens* strain MBI 600, that inhibits seedling and root pathogens, such as *Fusarium* spp., *Rhizoctonia* spp., and *Pythium ultimum* 

*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*).

When combined as **Velondis Plus**, the differential modes of action of the two biological actives 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. In addition, **Velondis Plus** has been shown to increase root nodulation by nitrogen-fixing bacteria when used on legumes. This increase in nodulation is a result of a healthier root system allowing formation of more sites for nitrogen-fixing nodules.

#### 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**

**Velondis Plus** 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 **Velondis Plus** as a waterbased slurry alone or with other seed treatment products (fungicides, insecticides, nematicides, fertilizers, and rhizobial inoculants). **DO NOT** mix **Velondis Plus** with any copper-based products.

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

To mix, first add the other seed treatment product(s) to the mix tank with approximately 1/2 of the required water. Slowly add **Velondis Plus** 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 **Velondis Plus** 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.

Because smaller seed has a greater surface area to volume ratio than larger seed, the average size of the seed being treated influences the application rate. For each crop listed in the **Crop Specific Directions** table, apply **Velondis Plus** at rates from the higher end of the specified application rate range when treating smaller seed. Additionally, use the higher end of the specified application range when treated seed is to be planted in fields that historically experience severe disease pressure.

#### For Use as an In-Furrow Treatment

Mixing Instructions: Apply Velondis Plus as a waterbased slurry alone, or with other in-furrow products (fungicides, insecticides, nematicides, fertilizers, etc.). Additionally, rhizobial inoculant products, such as BASF's Vault<sup>®</sup> Liquid Peanut Rhizobial Inoculant, can be added to the tank mix.

Prior to mixing, determine physical compatibility by mixing proportional quantities of the products in water. **DO NOT** mix **Velondis Plus** with any other in-furrow product that bears a label prohibition against such mixing. When tank mixing **Velondis Plus** with any other in-furrow product, observe the most restrictive of the labeling limitations and precautions of all products used in mixtures.

**ATTENTION:** If rhizobial inoculants are to be used in the tank mix with other in-furrow treatments (fungicides, insecticides, nematicides, fertilizers, etc.), make sure that they are compatible (not harmful) to the rhizobia. Likewise, use only cool, chlorine-free water in the tank mix. If one or more treatments are not compatible (harmful), mix those products in, and apply them from, a separate mix tank.

To mix, first add the other in-furrow product(s) and/or the rhizobial inoculant product(s) to the mix tank with approximately 1/2 of the required water. Slowly add **Velondis<sup>™</sup> Plus biofungicide** 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.

**Application Instructions:** For preventative control and suppression of seed pathogens (e.g., *Alternaria* spp.) and plant root pathogens (e.g., *Rhizoctonia* spp. and *Fusarium* spp.), apply **Velondis Plus** in 2.5 to 20 gal (9 to 76 L) of water per acre via standard agricultural application machinery. Some ingredients in **Velondis Plus** 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. **Velondis Plus** must be covered with soil immediately after application. The unit of **Velondis Plus** will treat up to 10 acres in-furrow when appropriately diluted per the application instructions.

# Peanuts - Vault Liquid Peanut Rhizobial Inoculant Plus Velondis Plus

Velondis Plus can also be used in conjunction with rhizobia-based inoculant products, such as BASF's Vault<sup>®</sup> Liquid Peanut Rhizobial Inoculant. When used in combination with the Vault Liquid Peanut Rhizobial Inoculant, Velondis Plus provides the additional benefit of improving the nodulation of the roots by rhizobia bacteria in the Vault Liquid Peanut Rhizobial Inoculant.

The **Vault Liquid Peanut Rhizobial Inoculant** consists of one (1) plastic bladder containing 1.1 gal.

The **Vault Liquid Peanut Rhizobial Inoculant** is co-packed in the same box with one (1) bottle containing 3.4 fl ozs of **Velondis Plus**.

One (1) **Vault Liquid Peanut Rhizobial Inoculant** and one (1) bottle containing 3.4 fl ozs of **Velondis Plus** are designed be used together to treat approximately 10 acres of peanuts.

Note that **Velondis Plus** is designed to work with the **Vault Liquid Peanut Rhizobial Inoculant**. Furthermore, the **Vault Liquid Peanut Rhizobial Inoculant** does not affect the activity of **Velondis Plus**.

Mix the one (1) plastic bottle of **Velondis Plus** with the one (1) plastic bladder of **Vault Liquid Peanut Rhizobial Inoculant**, and an appropriate quantity of chlorine-free water. For more detailed mixing instructions see directions on the outside panel of the **Vault Liquid Peanut Rhizobial Inoculant Plus Velondis Plus** co-pack box.

# **Crop Specific Directions**

Сгор	Target Diseases	Velondis <sup>™</sup> Plus biofungicide Use Rate per Application
Root and Tuber Vegetables	Fusarium spp.	0.0001-10.0 fl ozs per 100 lbs of seed
Beet, sugar	Rhizoctonia solani	0.003-300 mL per 45.4 kg of seed
Beet, garden		
Burdock, edible	Pythium ultimum	
Carrot		
Celeriac (celery root)		
Chervil, turnip-rooted		
Chicory Ginseng		
Horseradish		
Parsley, turnip-rooted		
Parsnip		
Radish		
Radish, oriental (daikon)		
Rutabaga		
Salsify (oyster plant)		
Salsify, black		
Salsify, Spanish		
Skirret		
Turnip		
Arracacha		
Arrowroot		
Artichoke, Chinese Artichoke, Jerusalem		
Canna, edible (Queensland arrowroot)		
Cassava, bitter and sweet		
Chayote (root)		
Chufa		
Dasheen (taro)		
Ginger		
Leren		
Potato		
Sweet potato		
Tanier (cocoyam)		
Turmeric		
Yam bean (jicama, manoic pea)		
Yam, true		(continued

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# Crop Specific Directions (continued)

Сгор	Target Diseases	Velondis <sup>™</sup> Plus biofungicide Use Rate per Application
Legume Vegetables Bean (Phaseolus spp.) Bean (Vigna spp.) Jackbean Pea (includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea) Pigeon pea Soybean (immature seed) Soybean Sword bean Broad bean (fava bean) Bean (Lupinus spp.) Chickpea (garbanzo bean) Guar Lablab bean (hyacinth bean) Lentil	Fusarium spp. Rhizoctonia solani Pythium ultimum	0.01-1.00 fl oz per 100 lbs of seed 0.3-30 mL per 45.4 kg of seed
Cereal Grains Barley Buckwheat Millet, pearl Millet, proso Oats Rice Rye Sorghum (milo) Teosinte Triticale (Triticum-Secale hybrids) Wheat Wild rice	Fusarium spp. Rhizoctonia solani Bipolaris sorokiniana Pythium ultimum	0.01-10.00 fl ozs per 100 lbs of seed 0.30-300 mL per 45.4 kg of seed

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# Crop Specific Directions (continued)

Сгор	Target Diseases	Velondis <sup>™</sup> Plus biofungicide Use Rate per Application
Oilseed Group except Rapeseed	Fusarium spp.	0.07-27.00 fl ozs per 100 lbs of seed
Borage Calendula Castor oil plant	Rhizoctonia solani	2.07-800 mL per 45.4 kg of seed
	Pythium ultimum	
Chinese tallowtree		
Cottonseed		
Crambe		
Cuphea		
Echium Euphorbia		
Evening primrose		
Flax seed		
Gold of pleasure		
Hare's ear mustard		
Jojoba		
Lesquerella Lunaria		
Meadowfoam		
Milkweed		
Mustard seed		
Niger seed		
Oil radish Poppy seed		
Rose hip		
Safflower		
Sesame		
Stokes aster		
Sunflower		
Sweet rocket Tallowwood		
Tea oil plant		
Vernonia		
Rapeseed		2.40 fl ozs per 100 lbs of seed
	Rhizoctonia solani	71.0 mL per 45.4 kg of seed
	Pythium ultimum	
Peanut	Fusarium spp.	0.01-0.03 fl oz per 100 lbs of seed
	Rhizoctonia solani	0.3-0.9 mL per 45.4 kg of seed
	Pythium ultimum	

# **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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