

PEANUT

General Information

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 agency responsible for pesticide regulation.

Product Information

Integral Liquid Biofungicide contains bacteria that colonize germinating seeds and inhibit seed pathogens such as *Alternaria* spp. 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* spp.). As root systems develop, the bacteria grow with the roots, extending the protection throughout the growing season. Because of this biological protection, vigorous root systems are established by plants, which often results in more uniform stands, and greater yields.

In addition, Integral 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.

Use Limitations

Chemigation: Do not apply this product through any type of irrigation system.

FOR USE AS AN IN-FURROW TREATMENT

Mixing Instructions: Apply Integral as a water-based slurry alone, or with other in-furrow products (fungicides, insecticides, nematicides, fertilizers, etc.). Additionally, rhizobial inoculant products, such as BASF's Vault 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 Integral with any other in-furrow product that bears a label prohibition against such mixing. When tank mixing Integral 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 $\frac{1}{2}$ of the required water. Slowly add Integral 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 Integral in 5 to 20 gal (19 to 76 L) of water per acre via standard agricultural application machinery. Some ingredients in Integral 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.

Limitations, Restrictions, and Exceptions

PEANUTS - Integral ONLY

Apply Integral at a rate of 0.1 - 1.2 fl oz (3 - 35 mL) per acre, after following the mixing and application procedures described above. Use the high end of the specified application rate when severe disease pressure is anticipated.

PEANUTS - Integral CO-PACKED WITH Vault Liquid Rhizobial Inoculant

Integral can also be used in conjunction with Rhizobia-based inoculant products, such as BASF's Vault Liquid Peanut Rhizobial Inoculant. When used in combination with the Vault Liquid Peanut Rhizobial Inoculant, Integral provides the additional benefit of improving the nodulation of the roots by Rhizobia in the Vault Liquid Peanut Rhizobial Inoculant.

The Vault Liquid Peanut Rhizobial Inoculant consists of one (1) plastic bladder containing 1.1 gal (4.2 L).

The Vault Liquid Peanut Rhizobial Inoculant is co-packed in the same box with one (1) 3.4 fl oz (101 mL) plastic bottle of Integral.

One (1) Vault Liquid Peanut Rhizobial Inoculant and one (1) 3.4 fl oz (101 mL) bottle of Integral are designed to be used together to treat approximately 10 acres of peanuts.

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

Mix the one (1) plastic bottle of Integral 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 Integral - Vault Liquid Peanut Rhizobial Inoculant co-pack box.

Method

[In Furrow](#)

Rates

[field rates 0](#)

[field rates 1](#)

-

Restricted Entry Interval

4 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.

Timings

N.A.