

INVERT CONTAINER AND SHAKE WELL BEFORE USE

KEEP OUT OF REACH OF CHILDREN

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**BioStart Terracin** contains a naturally occurring strain of *Bacillus amyloliquefaciens* BS 1b. Terracin can be used to suppress Armillaria in kiwifruit. It works by colonizing the rhizosphere and providing a level of protection against the Armillaria fungi.

**DIRECTIONS FOR USE. READ LABEL BEFORE USE.**

**Application:** For best results apply to damp soil or water in. Sprayers should be calibrated before use. Do not apply onto or into waterways.

CROP AND DISEASE	TIMING	TYPE OF APPLICATION & RATE
<b>Kiwifruit:</b> Armillaria suppression	4 weeks pre-bud break	<b>Orchard floor:</b> Apply 20 L/ha Terracin, water rate 2,000L/ha, (1 L/100 L) to the orchard floor. Ensure the lower trunk gets covered with the spray. Repeat programme annually.
	4 weeks pre-bud break	<b>Treatment of individual affected vines:</b> Apply to the root zone of the affected vine 20 L of a 1:100 diluted solution of Terracin (1 L/100 L). Treat all adjacent vines at the same rate. Ensure the lower trunk gets covered with the spray. Repeat programme annually.

BioStart recommends the application of Mycorrcin to enhance soil health.

3-4 weeks after application for Armillaria suppression, apply BioStart Mycorrcin at 10L/ha in 1000L water, then again in late November/early December.

**Mixing instructions:** INVERT CONTAINER AND SHAKE WELL. This product contains living microbes. Prior to use thoroughly clean the spray tank to remove any contaminating microbes and chemical residues that could be toxic to the Bs1b microbe. Partially fill the spray tank with clean water and start agitation. Maintain a spray solution pH between 5.0 and 7.5 or efficacy may be affected. Don't use chlorinated water. Add the required amount of Terracin to the tank. Complete filling. Use a slow agitation rate to mix. Apply diluted product within 8 hours of mixing.

Apply under low UV conditions.

**Handling precautions:** When mixing or applying, avoid contact with skin and eyes. Wear protective clothing, gloves and goggles. Flush applicator thoroughly with water after use. Do not eat or drink while using. Wash hands and face before meals and after work. Wash protective clothing after use.

**Withholding period:** Not required when used as directed

**Compatibility:** Apply Terracin on its own. Do not mix Terracin with BioStart Mycorrcin or BioStart Digester.

**Resistance management:** Terracin contains *Bacillus amyloliquefaciens* strain Bs1b and is part of the FRAC BM 02 fungicide group that consists of Biologicals with multiple modes of action (MOA), in the Biological Group of Bacterial *Bacillus* species. The BM 02 category was established by FRAC to accommodate a wide range of microbes with multiple modes of action that are not known to produce resistance issues and have a low risk of producing resistance. Terracin will assist in managing fungicide resistance provided it is used strictly in accordance with the label instructions and the resistance management strategies that exist for any fungus listed on the label.



# Terracin™

## SOIL BIOFUNGICIDE

For the suppression of Armillaria in kiwifruit

Active: *Bacillus Amyloliquefaciens* BS 1b not less than 1 x 10<sup>9</sup>cfu/L in the form of a suspension concentrate

Registered pursuant to the ACVM act 1997 No. P9935

See [www.foodsafety.govt.nz](http://www.foodsafety.govt.nz) for registration conditions

Approved pursuant to HSN0 Act 1996, Approval Code: HSR100362

See [www.epa.govt.nz](http://www.epa.govt.nz) for approval conditions.



Store out of direct sunlight and below 25 °C

net contents **20 L**

Made in New Zealand

**DIRECTIONS FOR USE. READ LABEL BEFORE USE.**

**Storage instruction:** Store below 25 °C. Store out of direct sunlight. **Keep out of reach of children.**

**Keep container tightly closed. Do not store diluted product.**

**Container disposal:** Triple rinse container and return to an approved AgRecovery Recycling Centre.

**First Aid:** If medical advice is needed have the product container or label on hand. If skin contact occurs, remove contaminated clothing and flush skin with running water, if irritation occurs seek medical advice. **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 seek medical advice.

**Spills:** When dealing with spills wear personal protective clothing and equipment. Contain the spill by damming, recover spilt product then transfer the recovered spilt material to a properly labelled drum. Deal with all spillages immediately to avoid product being released to the environment.

**It is an offence to use this product on animals.**

**HSNO Classifications:** 6.4A, 6.9B, 9.1D

**Warning:** Terracin is mildly irritating to the skin and irritating to the eye. When handling Terracin wear protective clothing, glasses and gloves and avoid contact with skin and eyes. Terracin is a soil biocide and is toxic to the aquatic environment, so avoid product release to the environment. Dispose of used container carefully.



For more information call: **New Zealand: 0800 116 229, Australia: 1800 359 559**



**Manufactured & distributed in New Zealand by:**  
BioStart Ltd, 17 Reta Crescent, Kerepehi 3671, New Zealand.  
Ph 0800 116 229 or [info@biostart.co.nz](mailto:info@biostart.co.nz) [www.biostart.co.nz](http://www.biostart.co.nz)

