



Vine Health Made Simple

VitiSeal™
INTERNATIONAL, LLC

A Revolutionary Treatment for Healthy Vine Management

Grapevine canker diseases cause hundreds of millions of dollars in damage and crop loss each year. Vineyards worldwide are afflicted with airborne fungal pathogens which harm the plants and inhibit production, including the infection by either *Eutypa lata* (also known as *Eutypa dieback*) or *Botryosphaeria* canker, the canker fungi most commonly isolated in California vineyards.

Grower losses in California alone equal
\$260 million per year

Bot cankers and *Eutypa lata* infect grapevines through pruning wounds during the dormant season by means of ascospores released from perithecia after rainfall. Canker diseases inhibit production and ultimately render the vine or tree useless. If cankers are not removed, the entire vine eventually dies.

Traditional synthetic fungicides typically used to treat *Eutypa dieback* and Bot canker must be

reapplied every 10 to 14 days during the pruning season, as well as after rain. Labor and product costs can thus be prohibitively expensive for any vineyard. For large vineyards, which start early in the season to timely complete their pruning, 3 or more applications can be required in some blocks. Excessive fungicide use can negatively impact the land and lead ultimately to disease resistance.

**Vine Surgery = \$2200 per acre - 200
acres needing surgery = \$440,000**

While approximately 70 percent of vineyards are treated with a topical pruning wound sealant or fungicides or both, some 30 percent don't treat at all. This is because of the mistaken supposition that the cost to treat is more than the cost to re-plant, retrain and lose 5 years of production yields. With Safecoat VitiSeal these concerns disappear.

**200 acres of VitiSeal Treatment
As little as \$2490**



Safecoat VitiSeal™ is the **ONLY** Biological and Natural approach rated
4 stars - excellent and consistent" - in efficacy against *Eutypa* in UC Davis' recent
"The Conventional Approach to Disease Control - Fungicides, Bactericides and Biolog-
icals for Deciduous Tree Fruit, Nut, Strawberry and Vine Crops 2012".

"Safecoat VitiSeal is an amazing material. It's essential oils so it's an organic product and right now it is registered not as a fungicide, but as a product to seal pruning wounds. It's an incredible product. So, that product is now available and the good thing about VitiSeal is that we've also looked at it, it's a paste, so it has to be painted on [but] if you put it in the tank at a 1:10 dilution you can actually spray it on. And a 1:10 dilution seems to be as effective as the paste itself."

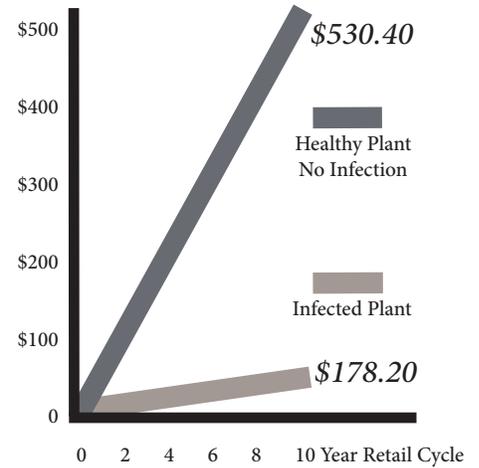
Renowned Plant Pathologist

Environmentally Safe Economically Smart



Safecoat VitiSeal™ is not a toxic fungicide, but rather a unique sealer that creates a resistant barrier against wood diseases such as Eutypa dieback, Botryosphaeria Canker and Esca. Safely and easily painted or sprayed onto vines, trunks, and tree bases, VitiSeal™ is water based, environmentally safe, contains no HAPs (hazardous air pollutants), has no re-entry wait restrictions after treatment, and has been proven effective by university research centers.

Retail Plant Yields



**Infected acre
retail yield
in 10 years.
\$1,571,724**

**Healthy acre
retail yield
in 10 years.
\$4,678,128**



The VitiSeal Solution



Safecoat VitiSeal Gallon Concentrate

VitiSeal™ is highly concentrated. For brush, painted or hand application, thoroughly mix 1 part VitiSeal™ concentrate with 9 parts water until the paste concentrate is completely diluted into a Ready To Use solution. One gallon concentrate is diluted with nine (9) gallons of water to make ten (10) gallons of Ready to Use in-the-field solution. ITEM NO. 18118

Safecoat VitiSeal Gallon Ready To Use

VitiSeal™ Ready To Use solution can be safely painted on cut spurs or wounds at an application volume of approximately 1/2 gallon per acre. Keep product agitated and in solution while using. Under normal temperatures and conditions, the applied solution will dry within 1-2 hours and form a barrier to promote wood and vine wound healing. Typical coverage is two (2) acres per gallon of solution (standard application is to paint, daub, brush or spray the solution onto cut spur positions - multiple application methods are feasible). ITEM NO. 18148

VitiSeal Ready To Use has been approved for use by California Certified Organic Farmers (CCOF) for use by organic and biodynamic growers. Information regarding submittal of materials request forms can be obtained at www.ccof.org.

3251 Third Avenue, San Diego, CA 92103 - 619.239.0321
www.vitiseal.com or contact us at info@vitiseal.com

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