

Scottzyme Cinn-Free



For Aromatic Whites

Scottzyme Cinn-Free is purified to eliminate the potential formation of undesirable aromatic phenols.

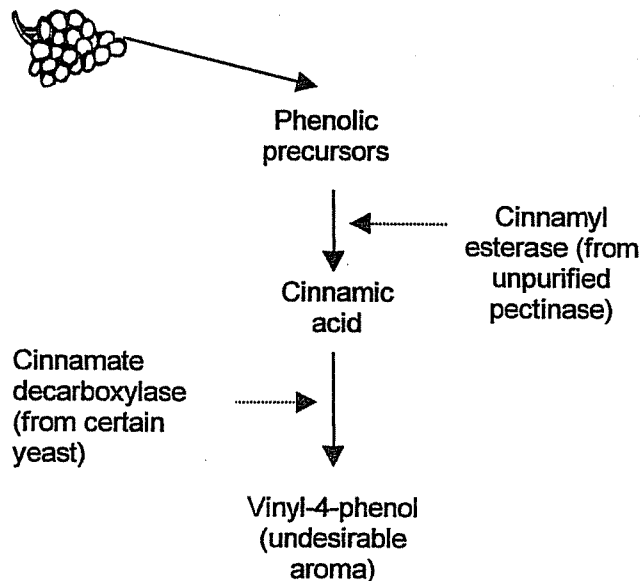
Cinn-Free was selected for its superb ability to perform two functions.

- Quickly breakdown pectin molecules to improve pressability, yield, settling, clarification and filtration.
- Liberate desirable aromas and aroma precursors trapped in the must by pectin. Treatment of the must to release aroma and aroma precursors is especially important in aromatic varieties like Sauvignon blanc, Riesling, Viognier, Pinot Gris, and Vignoles.

While standard pectinases can also liberate aromas and aroma precursors, some precautions should be taken due to enzymatic side activities. Pectinase treatment that liberates good aroma compounds can also release by enzymatic action an undesirable aroma precursor. Scottzyme Cinn-Free has been purified to remove this negative enzymatic side activity, cinnamyl esterase. Cinn-Free will liberate only the desirable aromas and aroma precursors from your grapes.

What does Cinnamyl Esterase Do?

Cinnamyl esterase takes certain phenolic precursors and converts them to cinnamic acids that can then be converted by some yeast into the unpleasant aroma, vinyl-4-phenol. The conversion of the phenolic precursor into vinyl-4-phenol is dependent on the enzyme as well as the yeast. If the yeast lacks the ability to convert cinnamic acid into vinyl-4-phenol, the unpleasant aroma will not occur regardless of the enzymatic treatment. Using Cinn-Free will allow the winemaker to select yeast without worrying about its ability to form vinyl-4-phenols.



When to Add Scottzyme Cinn-Free

- For best results, Cinn-Free should be in contact with the must before pressing. Add Cinn-Free as soon as possible to allow the enzymatic activities to release as many aromas and aroma precursors as possible.

Dosage Rate

- Must Additions: 20 to 40 ml/ton

Other Specialty Scottzymes for White Winemaking:

- **Color PRO:** Although it was selected as a color enzyme, there are many winemakers using Color PRO in whites for even better clarification and filtration. Color PRO has protease side activities that may explain its success. Pectin can complex with proteins making even bigger, more difficult to filter macromolecules.
- **Scottzyme KS:** KS is a blend of pectinase, cellulase, hemicellulase, and protease activities that will work on pectin as well as other trouble polysaccharide complexes. KS is the troubleshooting enzyme to use if no enzymes were used pre-fermentation or wine filtration problems occur.

Other Information:

- In compliance with AFT regulations, Scottzyme Cinn-Free is sourced from *Aspergillus niger*.
- Scottzyme Cinn-Free is Kosher but not for Passover.
- Scottzyme Cinn-Free is the result of a natural process. It is not sourced from genetically modified organisms.
- Bentonite will inactivate enzymes. Treat with bentonite only after finishing enzymatic treatment or make sure bentonite has been completely settled and racked before adding the enzymes.
- Scottzyme Cinn-Free requires at least 2 hours of must contact. If the treatment time is less, compensate by increasing the dosage of Scottzyme Cinn-Free.
- High levels of SO₂ (200 ppm) can inactivate Scottzyme Cinn-Free. Do not add Scottzyme Cinn-Free and SO₂ together. Mix well between additions.
- Scottzyme Cinn-Free is a liquid preparation. There are approximately 890 ml in one kilo of enzyme.
- Scottzyme Cinn-Free is available in 1-kilo bottles or 30-kilo totes.
- Scottzyme Cinn-Free is temperature sensitive and should be stored in a refrigerated environment. If stored properly, expect a 10% loss in activity per year.



2220 Pine View Way
Petaluma, CA 94955
Phone: 707-765-6666
Fax: 707-765-6674