



**LAFFORT**

*l'œnologie par nature*

# Preparing wines for using **CELSTAB®**

## **CELSTAB®** does not inhibit calcium tartrate crystallization

You need to be aware of the calcium level in your wine. If the calcium is above 60ppm, your wine is at risk of developing calcium tartrate crystals.

## Wine must be heat (protein) stable before **CELSTAB®** addition. Heat Stable = < 2 NTU change after wine is heated for 30 min at 80°C

**CELSTAB®** can interact with unstable proteins in the wine, forming a haze. It is important to check your heat stability after your bentonite treatment to make sure the wine is heat stable. If your wine cannot achieve heat stability, **MANNOSTAB®** might be a better option for your cold stability treatment.

## The initial degree of instability (%DIT) needs to be less than 25%

If the DIT% IS >25% the wine is too unstable for **CELSTAB®** to be effective. You can use the traditional cold treatment for a short time and then retest to see if it has come into range for **CELSTAB®** treatment.



## **CELSTAB®** is the last thing you add post-filtration

The wine must be less than 3 NTU at the time of addition. If pre-filtration is part of the preparation before bottling, **CELSTAB®** is added after the cellar filtration. **CELSTAB®** can interact with the components of the colloidal matrix, so you can only add it to a wine that is bottle ready. If **CELSTAB®** is added to a high NTU wine, it may interact with those solids in suspension and cause haze, precipitates or filtration issues.

## **CELSTAB®** addition is one standard addition rate:

1 mL **CELSTAB®** per liter of wine

Dilute **CELSTAB®** in 2 x the dosage volume with wine and meter into the tank – mix the tank to turn wine volume over two times in order to thoroughly mix the tank. **CELSTAB®** is a 10% solution so you are actually adding 100ppm of pure CMC to the wine – well below the current TTB limit.

## ISTC 50 Test to confirm cold stability

To confirm that **CELSTAB®** does cold stabilize the wine, do a bench trial with a filtered wine sample. Add 1 mL/L (0.75 mL or 750 ul) of **CELSTAB®** to 750 mL wine sample and send in for the ISTC 50 test. This is a modified conductivity test, taking into account that all the tartrate ions are still in solution with **CELSTAB®** treatment. You should see less than a 4 µS (micro siemens) change from minute 40 to minute 120 in a passing ISTC 50 test.

## Wait at least 48 hours between **CELSTAB®** addition and filtering through a 0.45 micron membrane

**CELSTAB®** needs time to react and equilibrate with colloidal matrix components of the wine.

Filterability decreases initially – but recovers within the 48 hour window. If you add **CELSTAB®** the morning of bottling you will have difficulty getting through the (0.45µm) sterile membrane on the bottling line.

Temperature of the wine at bottling should be >60°F

## Rosé wines need to be color stable before **CELSTAB®** addition

**CELSTAB®** can react with free anthocyanins in addition to the tartrates in the wine therefore, the wine will not be adequately protected and can develop precipitates if the wine is not color stable at the time of addition. See the test for color stabilization at the bottom of the **CELSTAB®** checklist.