



We at Enartis continue to provide you with the latest innovations in wine stabilization! We are happy to announce the newest members to our Enartis Stab Family - Cellogum LV 20 and Enartis Stab Mega.

CHILL OUT

Enartis alternative to cold stabilization

CHILL OUT is a proven strategy that consists of a series of operations from harvest to bottling with the objective of stabilising your white, rosé and red wines by simply adding colloids and not using cooling. With the ever increasing drive to save on energy costs, Enartis has a solution to address this effectively whilst improving the quality of your wines.

Tartaric instability and Cellogum LV 20

We all know that tartrate instability in wine causes a crystal precipitate in bottled white, rosé and red wines when exposed to cold temperatures. This precipitate is unacceptable to the consumer and can go as far as damaging the reputation of your brand. The crystals formed are mainly due to a natural presence of Potassium Bitartrate (KHT) in grapes, and wines. As alcohol increases during fermentation, this KHT-salt becomes insoluble in wine, and increasingly so at low temperatures. Each wine differs in its "holding capacity" for KHT, once this limit has been reached the wine will become oversaturated with KHT. This oversaturation allows for crystals to be formed and 'drop out' together with a drop in wine acidity.

Carboxymethylcellulose (CMC) has become popular as an efficient alternative to traditional cooling methods for white and rosé wines. It is both economical and rules out the effects from the harsh treatment of cold stabilization. How does CMC prevent the crystals from forming? Quite simply, the mechanism to inhibit crystal precipitation rests on CMC's negative charge at wine pH (2.9 - 4 pH), causing an interaction with the electropositive surface of the KHT-crystal. CMC removes several faces of the crystal, causing a flatter crystal surface that renders it unable to grow.

What makes our newest **Cellogum LV 20** so unique from other CMC products?

- » It is a 20% CMC solution
- » Easily homogenized in wine
- » Less contact time is needed - the low viscosity means no more waiting before final filtration and bottling



No effect on a wine's filterability when used correctly!

(See Fig. 1 below)

EFFECT OF CELLOGUM LV 20 ON WINE FILTERABILITY

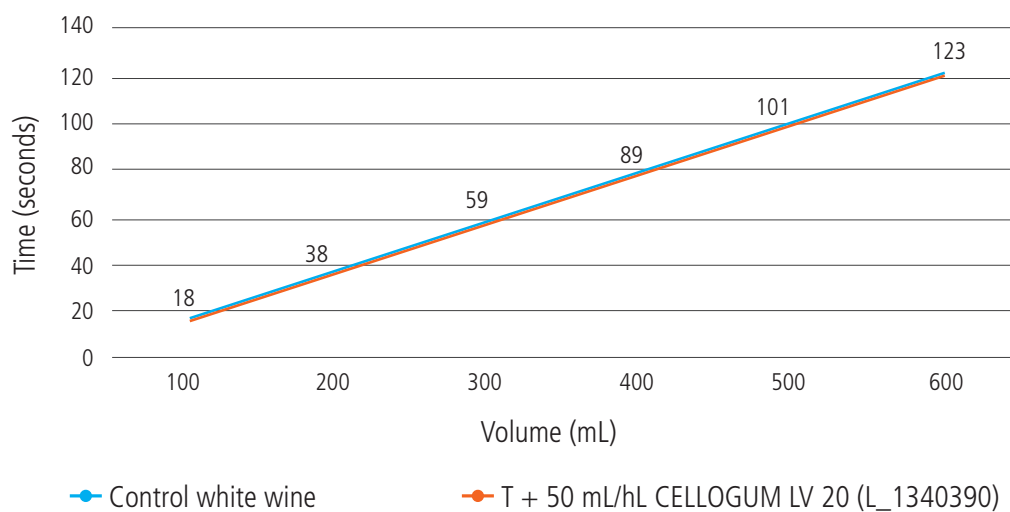


Fig. 1: The effect of Cellogum LV 20 (50 mL/hL) on wine filterability vs a control wine.

How can you stabilize a red wine using colloids?

Introducing Enartis Stab Mega, this unique liquid product is a blend of CMC, Gum Arabic and mannoproteins. This exclusive formulation works in various ways - unstable colour compounds are kept in suspension by the Gum Arabic; CMC stabilizes unstable tartrates; and the mannoproteins further aid in overall wine stability. *(Please note that CMC on its own should never be used on red wine as one risks the wine becoming turbid and colour precipitating out of the wine).*

Please contact your Enartis representative for guidance using Enartis Stab Mega, and keep in mind that it may have a clogging effect if filtration follows addition.



THE VISIBLE STABILIZING EFFECT OF STAB MEGA ON TWO DIFFERENT RED WINES, AS SEEN AFTER A FRIDGE TEST AT -4°C FOR 6 DAYS

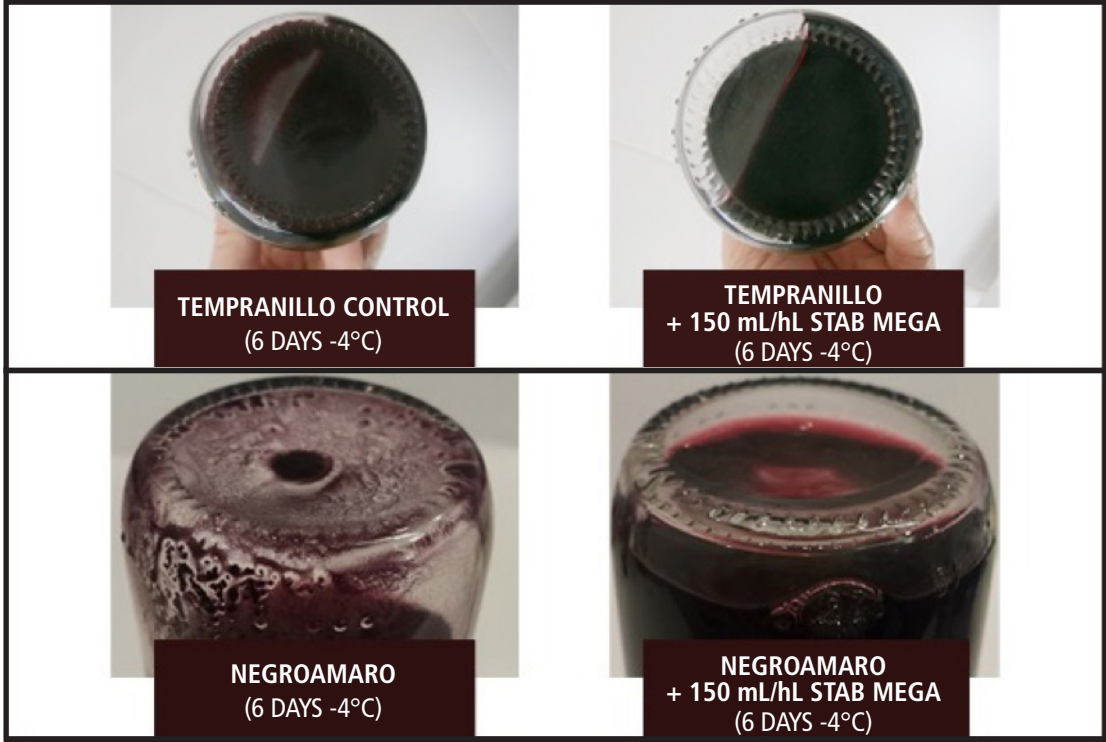


Fig. 2: The visible stabilizing effect of Stab Mega on two different red wines, as seen after a fridge test at -4°C for 6 days.

SENSORIAL IMPACT OF STAB MEGA VS COLD TREATMENT

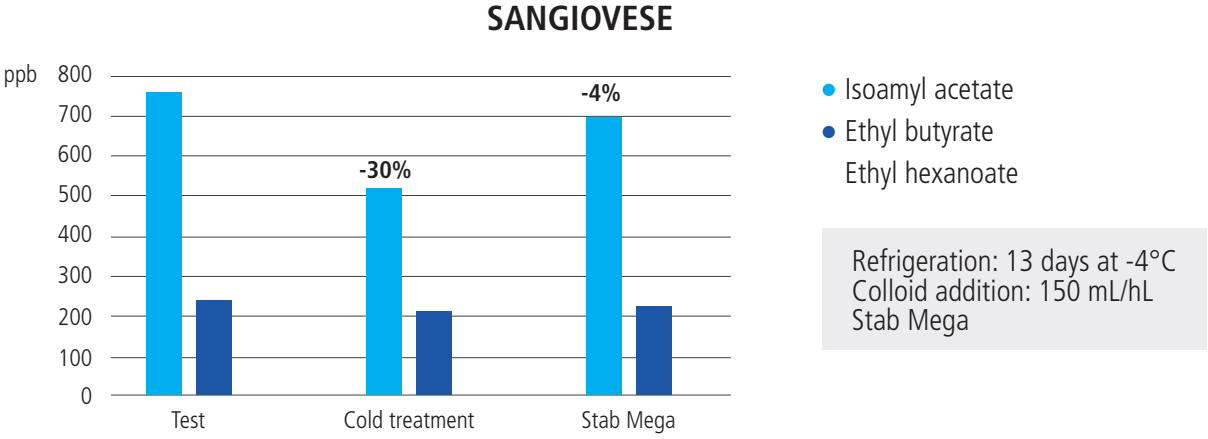


Fig. 3: The effect of Stab Mega (a blend of gum Arabic and CMC) on a Sangiovese wine's concentration of Isoamyl acetate and Ethyl butyrate respectively



The graph above indicates how less aromatics are lost during stabilization, when Stab Mega is used, compared to a rigorous cold treatment.

The Enartis Stab Lab at your service!

Send us your samples for FREE testing and advice on various treatments and product applications! We will even collect your wine samples for FREE!

We perform conductivity tests with our Tartarcheck machine and all results are verified with fridge tests (six days at -4°C) for the most accurate result.

CHILL OUT - and send us your wine samples!

The do's and don'ts of CMC-products

THE DO'S AND DON'TS OF CMC-PRODUCTS

DO	DON'T
...filter a wine before treatment	...treat a red wine with CMC alone unless after trials in combination with Maxigum
...laboratory trials to determine CMC's suitability to use in a wine	...cross flow a wine after treatment with colloids
...add CMC to FINAL blends	...add CMC to unclear wines (ideally NTU should be below 1)
...Test wines for protein stability before treatment with CMC	...treat a wine that is not filterable as is
	...add bentonite or other fining agents after treatment with CMC. If a fining is needed after addition, recheck the wine's tartrate stability status
	...add acids after CMC stability trials
	...treat lysozyme-containing wines with CMC. If there is residual lysozyme, a bentonite fining is first required before a CMC addition