CELLOGUM L

CELLULOSE GUM-BASED TARTRATE STABILIZING AGENT

COMPOSITION
Aqueous solution composed of 5% E466 sodium carboxymethyl cellulose (CMC) and 0.3% ± 0.15% E220 sulfur dioxide.

GENERAL FEATURES
Appearance: clear, colorless solution with a sulfur dioxide odor

Cellogum L is an aqueous solution containing sodium carboxymethyl cellulose with low viscosity and high substitution degree. It is formulated for enological use and conforms to the International Enological Codex.

To be used during wine processing to inhibit the formation and growth of potassium bitartrate crystals which could precipitate after bottling.

CMC is a stable product that does not hydrolyze under normal wine storage conditions. For this reason, **Cellogum L** has a long-lasting effect and can reduce, and in some cases, completely eliminate the use of physical stabilization treatments such as cold stabilization and electrodialysis. This significantly reduces energy costs and processing times.

The liquid form allows for an easy and immediate application of carboxymethyl cellulose and can be used in wineries that do not have access to hot water. It also avoids long and laborious preparation needed for powdered products.

The carboxymethyl cellulose (CMC) component of **Cellogum L** does not have any negative impacts on wine sensory qualities, is non-allergenic and is GMO free.

APPLICATIONS
Tartrate stabilization of still and sparkling wines.

DOSAGE
From 100 to 200 mL/hL (maximum dosage permitted in the EU)

INSTRUCTIONS FOR USE

Adding the product to wine

1. Dilute **Cellogum L** in at least 3-4 times its volume of wine (for example, add 1 liter of **Cellogum L** to 3-4 liters of wine).
2. Stir well to assure a perfect homogenization of **Cellogum L** in the wine.
3. Let sit for at least 2-3 hours.
4. Mix the **Cellogum L** and wine solution and add to wine to be treated, if possible using a Venturi system and being careful to homogenize well throughout the wine.

WARNING: inadequate product homogenization can cause filtration problems.

When and how to treat wines

Sparkling wines

At *tirage:* use **Cellogum L** in base wine already clarified and ready for *tirage*. Add homogenously before other riddling aids. **Cellogum L** use during "tirage" does not cause any clarification problems during "*remuage*".

Still white wines

Cellogum L must be added to clarified, perfectly clear (turbidity < 1 NTU), not very cold (temperature > 12°C or 53.6°F) and protein stable wine that is ready for bottling. CMC reacts strongly with proteins, in particular with lysozyme, consequently causing turbidity and precipitate formation. Before using **Cellogum L** it is essential for the wine to:

- be protein stable
- not contain residual fining proteins

ESSECO srl
San Martino
Trecate (NO) Italy
Tel. +39-0321-790.300
Fax +39-0321-790.347
vino@enartis.it
www.enartis.com

- not contain lysozyme
- not be treated later with lysozyme.

Cellogum L can be added to wine at least 24-48 hours before bottling. Shorter time intervals between product application and bottling could lead to slower filtration and potential filter clogging. In any case, checking the filtration index before bottling is advised.
WARNING: do not cross-filter wines added with **Cellogum L.**

Still red and rosé wines

Cellogum L can be added to wine 1 week (minimum 48 hours) before bottling, to clarified, perfectly clear wine that is free of unstable color substances and that is ready for bottling. Shorter time intervals between product application and bottling could lead to slower filtration and potential filter clogging. In any case, checking the filtration index before bottling is advised.

CMC is negative-charged and reacts with positive charged color compounds causing their precipitation. Therefore, stabilizing color (clarification and/or cold treatment) and conducting preliminary laboratory trials is advised before adding **Cellogum L**, especially for young wines. Nevertheless, color precipitation or the appearance of cloudiness can't be excluded, especially if wine is exposed to low temperatures. The use of a gum Arabic effective for color stability like **MAXIGUM** in combination with **Cellogum L** helps to prevent color precipitation.
WARNING: do not cross-filter wines with **Cellogum L.**

For the above described applications, determining the right **Cellogum L** dosage by first conducting laboratory trials with increasing product dosages and consequent protein and colloid stability evaluations with commonly used methods (cold test, conductivity, color stability, heat test etc.) is advised.

No negative interactions between **Cellogum L** and other enological coadjuncts such as metatartaric acid, tannins and gum Arabic have been observed.

For a more detailed protocol of use of **Cellogum L**, please refer to Enartis Vinquiry technical assistance.

PACKAGING AND STORAGE
1 L
25 Kg
200 Kg
1000 Kg

Sealed package: store away from sunlight, in a cool, dry, well-ventilated area.
Opened package: carefully reseal and store as described above.

Product approved for winemaking, in accordance with:
Reg. (CE) N. 606/2009
21 CFR 182.1745 – Authorized by the TTB to stabilize wine by preventing tartrate precipitation. The amount used must not exceed 0.8% of the wine.

Product composed of substances that conform to the characteristics required by the:
Codex Œnologique International
Reg. (EU) N.231/2012

ESSECO srl
San Martino
Trecate (NO) Italy
Tel. +39-0321-790.300
Fax +39-0321-790.347
vino@enartis.it
www.enartis.com