








**STABILIZING AGENTS**

# ENARTISSTAB CELLOGUM LV20

Cellulose gum-based tartrate stabilizing agent

	<p><b>COMPOSITION</b> Aqueous solution composed of 20% E466 carboxymethyl cellulose (CMC) and about 0.3% E220 sulfur dioxide.</p>
	<p><b>GENERAL CHARACTERISTICS</b> EnartisStab Cellogum LV20 is an aqueous solution containing sodium carboxymethyl cellulose (CMC) with low viscosity and high substitution degree. It is formulated for enological use. To be used during white, rosé, sparkling and carbonated wine processing to inhibit the formation and growth of potassium bitartrate crystals which could precipitate after bottling. EnartisStab Cellogum LV20 has a long-lasting effect and can reduce, and in some cases, completely eliminate the use of stabilization treatments such as cold stabilization and electro dialysis. This significantly reduces energy costs and processing times. Because of its low viscosity, EnartisStab Cellogum LV20 has a low impact on wine filterability which makes it ideal for use when CMC is added before microfiltration. The carboxymethyl cellulose component of EnartisStab Cellogum LV20 does not have any negative impacts on wine sensory qualities, does not contain animal products and is GMO-free.</p>
	<p><b>APPLICATIONS</b> Tartrate stabilization of white, rosé, sparkling and carbonated wines.</p>
	<p><b>DOSAGE</b> 25-100 mL/hL (0.95-3.8 L/1,000 gal). Maximum dosage permitted in the EU.</p>
	<p><b>INSTRUCTIONS FOR USE</b> <b>Addition to Wine</b> Dilute EnartisStab Cellogum LV20 in at least 3-4 times its volume of wine. Stir well to assure complete homogenization of EnartisStab Cellogum LV20 in wine. Caution: Poor homogenization can cause stability and filtration problems.</p> <p><b>When and How to Treat Wine</b> Sparkling and carbonated wines:</p> <ul style="list-style-type: none"> <li>▪ Add EnartisStab Cellogum LV20 to base wine that has already been clarified and is ready for <i>tirage</i>.</li> <li>▪ Add homogenously before other riddling aids. EnartisStab Cellogum LV20 use during <i>tirage</i> does not cause any clarification problems during <i>remuage</i>.</li> </ul> <p>Still white and rosé wines: EnartisStab Cellogum LV20 must be added to clarified, perfectly clear (turbidity &lt; 1 NTU), not too cold (temperature &gt; 12°C or 53.6°F) and protein stable wine and, in the case of rosé wines, without unstable color, that is ready for bottling.</p> <p>CMC reacts strongly with proteins, particularly with lysozyme, consequently causing turbidity and precipitate formation. Before using EnartisStab Cellogum LV20, it is essential for wine to:</p> <ul style="list-style-type: none"> <li>▪ be protein stable</li> <li>▪ not contain residual fining proteins</li> <li>▪ not contain lysozyme</li> <li>▪ not be treated with lysozyme at a later date.</li> </ul>

The indications given here correspond to the current state of our knowledge and experience, however they do not relieve the user from compliance with safety and protection regulations or from improper use of the product.

	<p>Due to charge affinity, CMC reacts with unstable color matter and causes it to precipitate. In rosé wines, it is recommended to perform preventive laboratory tests before adding EnartisStab Cellogum LV20. The use of Maxigum gum Arabic in combination with EnartisStab Cellogum LV20 helps to prevent color precipitation.</p> <p>EnartisStab Cellogum LV20 has limited impact on the filterability of the wine, however, it is recommended to evaluate the filterability index before bottling. If necessary, EnartisStab Cellogum LV20 can be added after microfiltration using an automatic dosing device (consult Enartis technical service). It is also advised to consult the membrane supplier before cross-filtering wines treated with EnartisStab Cellogum LV20.</p> <p>Due to the reasons described above, to correctly apply Cellogum LV20, it is recommended to carry out trials in the laboratory with increasing doses of the product and assess the impact on tartaric stability, colloidal stability and filterability of wine (cold test, Minicontact test, protein stability test, filterability index, etc.).</p> <p>No negative interactions have been found between EnartisStab Cellogum LV20 and other enological adjuvants such as metatartaric acid, tannins or gum Arabic.</p> <p>For more precise tuning of the process of colloidal stabilization, it is recommended to consult technical service at Enartis.</p>
	<p><b>PACKAGING AND STORAGE CONDITIONS</b> 20 kg, 1000 kg</p> <p>Sealed package: keep in a cool, dry and well-ventilated area. Opened package: carefully reseal package and keep as indicated above.</p>
	<p><b>COMPLIANCE</b> The product is in compliance with the following specifications: Codex Oenologique International Reg. (EU) N.231/2012</p> <p>Product approved for winemaking in accordance with: Reg. (EU) N. 2019/934 and subsequent amendments.</p> <p>Product approved by the TTB for winemaking in accordance with 27 CFR 24.246 to stabilize wine by preventing tartrate precipitation. The amount used must not exceed 0.8% of the wine.</p>

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