

CRISTAB GC

Pure cellulose gum

TARTARIC STABILISATION IN WINES

CHARACTERISTICS – PROPERTIES

- ◆ **CRISTAB GC** is a cellulose gum. Cellulose gums are natural and come from wood cellulose. The forests from which this wood comes from are sustainable managed.
- ◆ **CRISTAB GC** ensures tartaric stabilisation in effervescent and still wines. It has been selected on account of its effectiveness for stabilising wines in regard to potassium bitartrate and calcium tartrate precipitations, as well as for its organoleptic neutrality.
- ◆ **CRISTAB GC** presents highly specific characteristics (degree of substitution, degree of polymerization and viscosity) making it particularly well-adapted and efficient for ensuring tartaric stability in wines.
- ◆ **CRISTAB GC** is efficient over time : trials carried out on effervescent wines have shown that over 4 years after having added **CRISTAB GC**, the wine's tartaric stability is still assured.
- ◆ **CRISTAB GC** conforms to the international oenological Codex.
- ◆ **CRISTAB GC** is available in powder form or in the form of a clear viscous liquid, 50g/L concentration.
- ◆ **CRISTAB GC** acts both on crystal formation (nucleation) and on the growth of potential tartar micro-crystals that are present in the wine.

LEGISLATION

- ◆ The European Union authorizes the addition of cellulose gums to ensure tartaric stabilisation "*only with wine and all categories of sparkling and semi-sparkling wine* » (Commission regulation n°606/209).
- ◆ Maximum legally authorised dosage: 10g/hL (100mg/L).

DOSAGE AND INSTRUCTIONS FOR USE

◆ Dosage

Powder : 10g/hL, 10g/100L

Solution : 20cL/hL, 20cL/100L

◆ Preparing the solution:

Dissolve **CRISTAB GC** in hot network water (temperature 40°C to 50°C)

Mix the water with an agitator or rotor.

Sprinkle the **CRISTAB GC** onto the water being agitated, the solution obtained is highly emulsified; it is recommended to prepare it the day before treatment to allow air bubbles to disappear.

Depending on the agitation method, make a solution of 50g/L (1kg in 20L water) or 25g/L (1kg in 40L water)



STATION
GENOTECHNIQUE
de CHAMPAGNE

◆ **Instructions for use:**

- Before utilization, dilute the solution obtained, or liquid **CRISTAB GC**, to 1/3 or 1/4 with wine.

Note: low temperatures (<12°C) increase the viscosity of **CRISTAB GC**. Under such conditions, we recommend to pre-dilute to 1/4.

◆ **On effervescent wines :**

At bottling : add **CRISTAB GC** into the mixture

At disgorging : add **CRISTAB GC** to the wine/sugar mixture (liqueur d'expédition). Ensure the mixture is well-homogenised before using.

◆ **On still wines:**

- **CRISTAB GC** can be added at least two days before filtration in order to limit fouling. Add to the entire volume of wine using a metering pump or at the fining connection.
- Homogenization is essential in order to prevent filter fouling. The utilization of a nitrogen pipe is not recommended for this operation. Homogenization should be performed exclusively by transferring the wine from tank to tank, or during pumping over of a volume at least equal to the tank volume (it is essential to use the lowest fining connection).
- **Do not use before cross-flow filtration.**

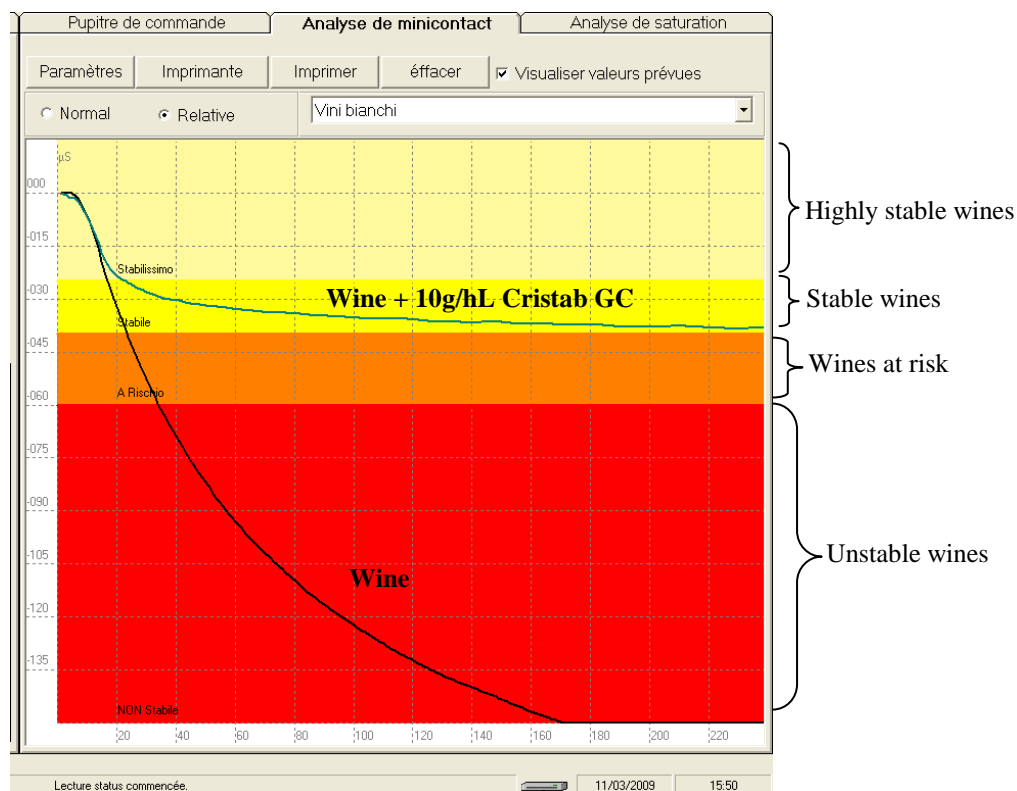


Figure 1 : **CRISTAB GC** effectiveness in regard to tartaric stabilisation

The R&D department has evaluated tartaric stability in wines. The results obtained are represented as shown above, with 4 stability zones.

The figure 1 shows that the wine used during trials presented here was unstable (black curve), and that a 10g/hL treatment with **CRISTAB GC** stabilised the wine in relation to tartaric precipitations (green curve).

NB : preliminary trials permit to :

- ◆ determine the ideal dosage (stability test after treatment: 6 days at -5°C)
- ◆ evaluate the interactions of cellulose gum with the colour of red or rosé wines.
- ◆ ensure that the treatment is sufficiently efficient on highly unstable wines, by carrying out a stability test (storage at -5°C for 6 days).

CRISTAB GC is used on previously stabilized wines with regards to protein casse. Like metatartaric acid, **CRISTAB GC** reacts with lysozyme.

PACKAGING

◆ Powder :

1kg sachet –20 X 1kg box
5kg bag –4 x 5kg box

◆ Solution :

5L canister
20L canister
1000L container

QUALITY – SAFETY - ENVIRONMENT

- ◆ Traceability : the batch number on all **CRISTAB GC** packaging allows the product to be traced (product origin) and tracked (from product to consumer).
- ◆ Safety – environment: manipulating **CRISTAB GC** represents no danger to the user.
- ◆ Non allergenic powder form product.
- ◆ The product in solution form is stabilised by SO₂.

STORAGE

- ◆ Full original sealed packaging, away from light in a dry and odour free environment.
- ◆ Guard against frost for the product in solution form.
- ◆ Once opened, use rapidly.

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