

STAB K®: USAGE PROTOCOL

Protocol of dosage determination for STAB K® treatment



STAB K® is a 15% solution of mannoproteins chosen for its capacity to inhibit the nucleation of potassium tartrate salts (their efficacy against neutral calcium tartrate salts has not been demonstrated). Replicating the mechanisms of lees contact, STAB K® is a natural alternative for the tartaric stability of red, rosé or white wines.

STAB K® is a useful alternative for matured wines whose natural stability by the lees is not sufficient, or for tricky rosé or white wines which can not be stabilised by CMC. On red wines, STAB K® also contributes to the stabilisation of the colour.

Preliminary trials are necessary in order to determine the optimal dosage for the treatment for each wine.

Target wines

STAB K® is used on wines **ready for bottling**. The operations described below must be carried out before STAB K® treatment:

- fining,
- racking,
- blending,
- protein stabilisation,
- colour stabilisation,
- prefiltration*.

STAB K® **does not modify the filterability** of wines correctly prepared for bottling.

* STAB K® only inhibits the **nucleation phase** (1st step in crystal formation) but does not inhibit the growth of already formed crystals. It may therefore be helpful to carry out a prefiltration small enough to eliminate the already formed nuclei.

Preparation of the sample for trial

The samples of wine must be perfectly **representative** of the batch to be treated. Set up modalities with increasing doses of STAB K®, up to the **maximum recommended dose of 20 cL/hL** (if the maximum dose is not sufficient for stabilisation, we do not recommend using STAB K® as the only tartaric stabilisation tool).

Example of the range of trial samples with increasing doses of STAB K® (in cL/hL):

0 (control) – 5 – 10 – 15 – 20

If a filtration is planned after the STAB K® treatment, it is important to carry out a filtration with the **same size pores** on the range of trial samples in order to model the impact of the filtration on the STAB K® treatment.

Determination of the optimal dose

The validation of the optimal dose for the treatment relies on the observation of the samples after a **crystallisation test** (on white wines and rosés, an ISTC50 test can be used): see the document “Crystallisation test 6 days at -4°C” available on our site. The minimum effective dose is the 1st for which **no crystals are observed** on the treated sample.

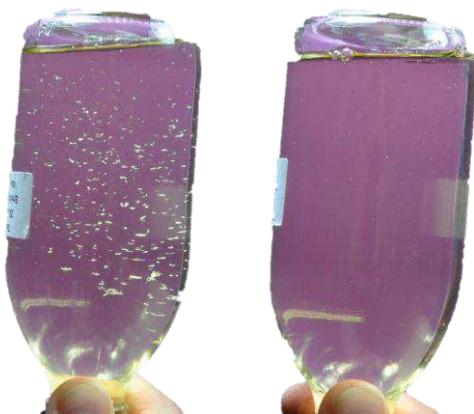
Treatment of the batch

A minimum of 24 hours before bottling, **add STAB K® directly** to the batch to be treated at the dose previously determined. Carry out a **good homogenisation**.

No other treatment should be carried out after STAB K® treatment, except for the adjustment of stabilisers (SO₂, ascorbic acid and/or arabic gum).

Examples of Crystallisation Test Results

Sauvignon / Sémillon, 2012 (DTI = 26%)



Untreated control STAB K® 10cL/hL

→ The samples are stable at 10 cL/hL of STAB K®
This dose is used for the treatment of the batch

Merlot, 2012 (DTI = 9%)



Untreated control

- Presence of tartaric crystals (coloured)
- No deposit of colouring matter

STAB K® 10cL/hL

- Absence of tartaric crystals
- No deposit of colouring matter