

# CRISTALINE

Isinglass powder

# CRISTAL

Ready-to-use liquid isinglass  
Concentration 10 g/L

**REFINES THE ORGANOLEPTIC CHARACTERS  
IMPROVES THE CLEARNESS AND THE FILTERABILITY**

## CHARACTERISTICS

- ◆ **CRISTALINE** and **CRISTAL** derive from a selection of swim bladders of fish.
- ◆ Isinglass is a proteinic fining agent which is very much delicate and adapted to the fining of white and rosé wines. It contributes clearness and brightness to wine. Its slow flocculation removes the smallest particles in suspension. Once the flocculation is over, the sedimentation starts rapidly.
- ◆ **CRISTALINE** and **CRISTAL** clarify the difficult wines. Isinglass is little sensitive to the colloids. It improves the filterability of the wines difficult to filter and especially those made of grapes with the botrytis disease (also use DEPECTIL ELEVAGE data sheet n°2.080).
- ◆ **CRISTALINE** and **CRISTAL** come as a complement to the filtration which they ease. After fining, the filter output is greatly improved.
- ◆ **CRISTALINE** and **CRISTAL** fix some of the bitterness notes and refine wines before the physical stabilization stages.
- ◆ After being treated with oenological charcoal, isinglass gathers the smallest particles and allows a complete elimination through filtration. Also, the contact wine-charcoal is shorter.
- ◆ Isinglass is usually considered as refining glue and of finishing (the necessary dosage is close to 1 to 2 g/hL). In this case, it does not require the addition of a fining adjuvant such as a tannin or silica gel.
- ◆ The long-time utilization of isinglass shows that it can have a great action on loaded wines, at the end of the malolactic fermentation for instance. In this very case, the necessary dosage can go up to 4 g/hL. It is then necessary to add 2 cL/hL to 4 cL/hL of SILISOL in order to get an optimal action on the improvement of the clearness, the filterability and the organoleptic characters.
- ◆ The results on the clarification and the filterability are not the only ones to be taken into account. Before using isinglass, to test the product is necessary in order to appreciate its effects on the organoleptic characters.

- ◆ **CRISTALINE** is presented as white granulates which are fragments of swim bladders of fish. It is ready to be diluted in cold water where it does not leave any residues.
- ◆ **CRISTAL** is the liquid form of **CRISTALINE**, presented above. We put **CRISTAL** in its solution-form and this, always shortly before **CRISTAL** is used. The protein of isinglass is altered rapidly and after a certain storage period, which gets even shorter if the temperature is high, becomes very much like a gelatine.
- ◆ Concentration : 10g/L of **CRISTALINE**

### DOSAGE

- ◆ **Light fining** :
  - **CRISTALINE** : 1 g/hL to 2 g/hL
  - **CRISTAL** : 10 cL/hL to 20 cL/hL.
- ◆ **Heavy fining**
  - **CRISTALINE** : up to 4 g/hL
  - **CRISTAL** : up to 40 cL/hL
- ◆ From 2 g/hL of **CRISTALINE** (or 20 cL/hL of **CRISTAL**) add 2cL/hL of SILISOL by gram of isinglass (or for 10 cL of **CRISTAL**)
- ◆ For an optimal result, we advise you to systematically test the product.

### INSTRUCTIONS FOR USE

- ◆ **CRISTALINE**  
Disperse in cold water (never use it in warm water) around 200 g of powder for 10 L of water. Stir vigorously with a blender or a propeller. Let it swell during a few hours. Stir again while incorporating an equal quantity of cold water. The final solution (10g/L) has to be very much liquid and homogenous.  
Do not prepare in advance, especially during summer.
- ◆ **CRISTAL**  
**CRISTAL** is ready to use (concentration 10 g/L of **CRISTALINE**).
- ◆ **FINING**  
Incorporate isinglass during a pumping over all over the tank. Use a dosage pump or a DOSACOL placed above a centrifugal pump.

### PACKAGING

- ◆ **CRISTALINE** : - 200 g bag,  
- 1 kg bag.
- ◆ **CRISTAL** : - 1 L flask,  
- 5 L, 10 L, 20 L flask.

## STORAGE

- ◆ Full original sealed packaging, store in a dry, odourless environment, out of the light.
- ◆ Once opened, use quickly.

## DESCRIPTION OF HAZARD

- ◆ **CRISTALINE** is classified as **Xi-Irritant**

**R36** : Irritating to eyes.

**S24/25** : Avoid contact with skin and eyes.

## RECOMMENDATIONS OF THE ENOLOGIST

- ◆ ***In order to achieve a fining with a proteinic fining agent, we remind you the following points :***
  - ***Keep a low temperature, inferior to 10°C if possible.***
  - ***Keep a steady temperature in order to avoid the convection flows which make the flakes spread upwards.***
  - ***No over-saturated carbon dioxide, which also makes the flakes spread upwards. After the malolactic fermentation, proceed to an aeration racking. The oxygen is necessary to achieve the fining.***
  - ***Add 2 or 3 g/hL SO<sub>2</sub> in order to stop any micro-organism activity (yeasts or bacteria).***
  - ***Incorporate slowly the fining agent all over the tank. Use a dosage pump or a DOSACOL.***
  - ***Avoid incorporating air bubbles when adding the fining agent.***
  - ***To add tannins is barely necessary when you use CRISTALINE or CRISTAL. In case of addition, it must be incorporated the day before you add the fining agent.***
  - ***The silica gel (SILISOL) is always necessary when the quantities of CRISTALINE exceed 2g/hL. It must be incorporated together with the fining agent and in the very same conditions (dosage pump or DOSACOL).***
  - ***You will get the results on the organoleptic improvement or on the filterability rapidly (2 to 3 days). You can proceed with a filtration right after.***
  - ***When you wish to achieve a complete clarification, you have to wait 2 to 3 weeks and then check the clearness and the lees packing-down before the racking.***