

Isinglass uses:

- to remove colloidal hazes
- for rapid settling of yeast to form compact lees
- to reduce astringent and harsh flavors of polyphenolic compounds without affecting desirable esters or fruity aromas
- to improve filterability
- to reduce the “browning” potential in blush and other young wines

Product Description

Isinglass is a very pure form of the complex protein, collagen. It has been used for centuries as a gentle yet effective clarifying agent for many different types of wine.

Gusmer offers two grades:

- **Drifine** - a pre-hydrolyzed form of highest purity that hydrates in 20-30 minutes in cool water (60°F or less).
- **Flocced Isinglass** - a fibrous form that hydrates in 24 hours at temperatures of 60°F or less.

NOTE: higher temperatures rapidly convert this collagen into a relatively ineffective gelatin.



How it works

The hydrolysis of Isinglass produces a high molecular weight protein that has a net positive charge at the acidic pH of wine. This positive charge causes flocculation of yeast and other suspended solids and also forms complexes with negatively charged polyphenols that are responsible for astringency and harsh flavors.

Why is it used?

Isinglass is used to gently modify flavor components in wines without adverse effects on desirable flavors and aromas. It is the choice of many sparkling wine producers for use as a riddling aid. Isinglass is also used to clarify wines that will not be filtered.

Preparation for a laboratory evaluation

Drifine: Mix 6 grams of Drifine into 1 liter of water (60°F or less). Mix for 2 minutes with a high speed mixer, allow to stand for 20 minutes and then mix again for an additional 2 minutes.

Flocced Isinglass: Mix 6 grams of Flocced Isinglass into 1 liter of water (60°F or less). If necessary, adjust pH to 2.4 - 2.9 with citric or tartaric acid. Mix until the Isinglass is uniformly dispersed (5 minutes). Mix intermittently over next 24 hour period.

NOTE: during mixing, heat may be generated. Do not allow the solution temperature to rise above 60°F.

Suggested Laboratory Evaluation

The general recommended usage rate is 1/2 to 2 1/2 ounces of Isinglass per 1000 gallons of wine.

0.1 ml of the stock solution as described above in 80 mls of wine is equivalent to 1 ounce of either Drifine or Flocced Isinglass per 1000 gallons of wine (0.2 mls/80 mls = 2 ounces per 1000 gallons).

Add the desired amount of Isinglass solution to the wine and invert the sample 2-3 times to mix.

Let the treated sample settle in a cool place (out of direct sunlight) for 24 hours and then evaluate for clarity and volume of lees. Decant the clear wine and evaluate the flavor and aroma of each sample and compare with a control. In most cases, Drifine is used at lower dosage rates than Flocced or other forms of Isinglass.

Procedure for use in the cellar

Drifine: Add one pound to 20 gallons of cold water (60°F or less). Mix well with high speed mixer. Let set 20 minutes, then mix well to achieve a homogeneous opalescent solution. This Isinglass is ready to use.

Flocced Isinglass: Add one pound to 10 gallons of cool water (60°F or less). Adjust pH (if necessary) to a pH of 2.4 - 2.9 with citric acid or tartaric acid. Mix well. Add an additional 10 gallons of water to each pound of Flocced Isinglass and mix intermittently over next 24 hour period. Mix again to achieve a homogeneous opalescent solution. This Isinglass is ready to use.

Methods of addition to wine

Mix either Drifine or Flocced Isinglass solutions well and slowly inject or add to the wine to be fined while rolling or pumping over. Let the treated wine settle then rack, centrifuge or filter.

NOTE: an Isinglass solution is relatively unstable and it is best to prepare only the amount to be used at any one time.

Use with other fining agents

Isinglass fining agents can be used in conjunction with most other fining agents, but should always be added separately. The addition of colloidal silicon dioxide after fining with Isinglass can accelerate the rate of settling and improve the compaction of lees.

Packaging

Both Drifine and Flocced Isinglass are packaged in one pound bags. Fifty pound containers are also available on special request.



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