

## Clarifying Fining SIHA® Isinglass



**SIHA Isinglass fining agent from Eaton's Begerow Product Line is a white granulate produced from specially selected swim bladders of various species of large fish. Granulation of isinglass simplifies handling and dosage in wine and improves shelf life. SIHA Isinglass fining agent reacts quickly and intensively with negatively charged beverage colloids, leading to quick clarification of wine.**

The specific advantages of SIHA Isinglass fining agent:

- Excellent granulate distribution and rapid flocculation
- Ideally suited for clarification of low-tannin beverages
- Preliminary testing not necessary because SIHA Isinglass fining agent does not tend to overfining/underfining
- Prepared from selected raw materials which are specially suitable for beverage fining

### Application

SIHA Isinglass fining agent is one of the few agents that can be used without preliminary testing; however the fining effect can be optimized if specific preliminary tests are carried out.

SIHA Isinglass fining agent has to be mixed to a colloidal solution prior to use. The resulting liquid fining solution (0.3%) is added to the beverage.

As the collagen of the isinglass decomposes in aqueous solution, only the quantity required for several days should be prepared.

### Preparation of a 0.3% isinglass solution for pre-tests of fining

Mix 0.11 oz (3 grams) of SIHA Isinglass fining agent in 33.81 fl oz (1 liter) of cold wine (46.4 – 50 °F (8 – 10 °C)) for 1 – 2 minutes, using a high-speed mixer. Then stir the mixture 2 – 3 times for a period of 30 minutes.

### Preparation of a ready-to-use isinglass solution for fining

Sprinkle the required quantity of SIHA Isinglass fining agent – proportional 25.04 lb/1,000 gal (3 g/l) in wine – into cold wine (46.4 – 50 °F (8 – 10 °C)) with a stirrer running at its highest speed. Avoid clumping. Once the entire quantity of SIHA Isinglass fining agent has been added, agitate 5 minutes, let expand 20 minutes, and agitate over again 5 minutes. The watery solution without SO<sub>2</sub> stabilization has a shelf life of three days at a storage temperature of below 59 °F (15 °C). At temperatures higher than 59 °F (15 °C), the solution should be used up immediately.

**Important:** Heating of the solution during stirring have to be avoided. Temperatures above 59 °F (15 °C) cause collagen to break down, leading to reduced clarification performance.

To conserve the isinglass solution it is sufficient to add SO<sub>2</sub> to ensure a content of approx. 0.83 lb/1,000 gal (100 mg/l) free SO<sub>2</sub>. Then fill into suitable containers and store at a cool temperature under 53.6 °F (12 °C). This solution should be used up within 6 – 10 weeks.

### Application quantities

If a preliminary test is not carried out, the following quantities can serve as a guide:

Application	Application quantity	
	in lb/1,000 gal (g/hl)	isinglass solution 0.3% fl oz/100 gal (ml/hl)
Fining of white wines	0.04 – 0.13 (0.5 – 1.5)	21.76 – 64 (170 – 500)
Clarifying of red wines	0.04 – 0.21 (0.5 – 2.5)	21.76 – 106.24 (170 – 830)
Secondary fining for complete precipitation of ferrous fining agents or to precipitate bentonite	0.04 – 0.08 (0.5 – 1.0)	21.76 – 42.24 (170 – 330)

### **Preparation and fining process**

Since an even distribution of relatively small quantities of active ingredients is necessary, thorough mixing of beverage and fining agent is very important. The fining solution 0.3% should therefore not be added to the wine directly but be pre-diluted with 5 times the quantity of beverage. The wine to be treated should be intensively agitated by means of an effective motor mixer and the freshly prepared fining suspension slowly pumped in.

Better results are achieved by adding the fining agent continually in the liquid stream when transposing the beverage.

### **Combination with other fining**

One of the main applications of SIHA Isinglass fining agent is for secondary fining of wines that have been fined with ferrocyanide of potassium. The advantage of isinglass is that it precipitates the fine colloidal turbidity that does not deposit easily.

To clarify difficult wines, e.g. wines made from flash pasteurized red wine mashes, combinations of SIHA Gelatine and SIHA Isinglass fining agents have proven beneficial in many cases. In such applications, the wine is first fined with SIHA Gelatine Liquid fining agent and then SIHA Isinglass fining agent is added. The mixing ratio should be between 3:1 or 10:1 (gelatin to isinglass). When combining fining agents a preliminary test should always be carried out. By adding BEVASIL® 30 silica sol fining agent, the fining process with isinglass can be accelerated. It is best to check with a preliminary test which proportion leads to the optimal solution.

### **Product Characteristics**

The natural fining agent SIHA Isinglass fining agent is prepared from the air bladders of large fish. The effective constituent of this centuries-old wine treatment agent is collagen, a protein substance of high molecular weight with excellent precipitation characteristics with respect to negatively charged colloids. In aqueous solution, collagen hydrolyzes to gelatin, especially under the effect of heat. Compared to gelatin the flocculation capacity of SIHA Isinglass fining agent is much less dependent upon negative charges, therefore it produces very good fining results in white wines with a low tannin content.

### **Safety**

When used as directed no negative effects are known.

Further safety information can be found in the relevant Material Safety Data Sheet, which can be downloaded from our website.

### **Storage**

SIHA Isinglass fining agent is produced and packed with utmost care in odor-free polyethylene bags. As it is a highly efficient adsorptive agent, it can adsorb off-flavors if stored inadequately. Therefore, it should be stored in carefully sealed packages in a dry and well-aerated area that is free of off-odors.

### **Delivery Information**

SIHA Isinglass fining agent is sold under article no. 98.103 and is available in the following package sizes:

0.55 lb (250 g)	PE bag
11.02 lb (5 kg)	PE bag
4 x 11.02 lb (5 kg)	PE bag in carton

HS Customs Tariff: 3503 00 80

### **Certified Quality**

SIHA Isinglass fining agent is monitored regularly during the production process to ensure consistently high quality.

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Not all products in Eaton's Begerow Product Line are available in all regions. Please contact your local Eaton office to determine availability.

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