Technical Data Sheet

Clarification
SIHA® Gelatin Liquid

SIHA Gelatin Liquid fining agent is a stable, 20% aqueous gelatin solution for treating grape mash and grape must.

Because it is easy to use, SIHA Gelatin Liquid fining agent is particularly recommended for the fining of mashes and musts and can usually be used without preliminary tests, based on empirical values. For the fining of wine and fruit juices a preliminary test should be carried out to determine the individual requirements and optimize the fining effect.

Preliminary Test

Pour 3.38 fl oz (100 ml) of beverage into a measuring cylinder and add diluted SIHA Gelatin Liquid fining agent (dilution ratio 20:1; 0.17 fl oz (5 ml) gelatin for 3.38 fl oz (100 ml) of water at 68 °F (20 °C)) according to the following table:

fl oz (ml) diluted gelatin solution (for 3.38 fl oz (100 ml) of beverage)	Corresponds to an addition to the beverage of
0.017 (0.5)	3.2 fl oz/100 gal (25 ml/hl) liquid gelatin = 0.42 lb/1,000 gal (5 g/hl dry gelatin)
0.03 (1.0)	6.4 fl oz/100 gal (50 ml/hl) liquid gelatin = 0.83 lb/1,000 gal (10 g/hl dry gelatin)
0.06 (2.0)	12.8 fl oz/100 gal (100 ml/hl) liquid gelatin = 1.67 lb/1,000 gal (20 g/hl dry gelatin)
0.09 (3.0)	19.2 fl oz/100 gal (150 ml/hl) liquid gelatin = 2.5 lb /1,000 gal (30 g/hl dry gelatin)

Add the exact quantity of diluted gelatin solution with a pipette and mix the preparation thoroughly by shaking the sealed cylinder. If there is no precipitation, flocculation can be triggered by adding BEVASIL® 30 silica sol fining agent (1 – 4 times the gelatin quantity).

Dilute BEVASIL 30 silica sol with a ratio of 1:10 (0.34 fl oz (10 ml) BEVASIL 30 silica sol fining agent solution for 3.38 fl oz (100 ml) of water at 68 °F (20 °C)).

A preliminary test can be done using following quantities:

Gelatin fining in the beverage fl oz/100 gal (ml/hl)	BEVASIL 30 silica sol fl oz/100 gal (ml/hl) of beverage	BEVASIL 30 silica sol, diluted fl oz/gal (ml/100 ml)
3.2 (25)	1.92 – 6.4 (15 – 50)	0.19 – 0.64 (0.15 – 0.5)
6.4 (50)	3.84 – 12.8 (30 – 100)	0.38 – 1.28 (0.3 – 1.0)
12.8 (100)	7.68 – 25.6 (60 – 200)	0.77 – 2.56 (0.6 – 2.0)
19.2 (150)	11.52 – 38.4 (90 – 300)	1.15 – 3.84 (0.9 – 3.0)

The fining effect sets in after several hours of reaction time. Please bear in mind that thanks to better mixing and the somewhat higher temperatures involved, the fining procedure will normally be completed more rapidly than in practical use.

Dosages

For the application of SIHA Gelatin Liquid fining agent without a preliminary test the following dosages can be used for guidance. Depending on the product, dosage required in practice may, however, vary considerably.

Application	SIHA Gelatin Liquid
Mash fining	
Healthy grapes	3.84 – 8.96 fl oz/100 gal (30 – 70 ml/hl = 6 –14 g/hl)
Partially rotten grapes	9.6 – 12.8 fl oz/100 gal (75 – 100 ml/hl = 15 – 20 g/hl)
Heavily rotten grapes/frost damaged grapes	12.8 – 25.6 fl oz/100 gal (100 – 200 ml/hl = 20 – 30 g/hl)
Must fining	6.4 – 12.8 fl oz/100 gal (50 – 100 ml/hl = 10 – 20 g/hl)
Fining of grape juice	6.4 – 12.8fl oz/100 gal (50 – 100 ml/hl = 10 – 20 g/hl)
Wine fining	3.2 – 10.24 fl oz/100 gal (25 – 80 ml/hl = 5 – 16 g/hl)

Fining Preparation and Procedure

SIHA Gelatin Liquid fining agent is easy to measure and dose. Provided it is thoroughly mixed it can be stirred directly into the beverage.

For mash finings and in applications where mixers with inadequate effect and unfavorably shaped containers are used, e.g. rectangular tanks or concrete tanks, it should be pre-diluted with about 10 times the beverage quantity.

For mash fining the pre-diluted SIHA Gelatin Liquid fining agent can be added continuously to the mash flow. If small mash containers are used, the fining may be distributed directly on the grapes, perhaps together with the required quantity of dissolved
SIHA Potassium Pyrosulphite stabilizer. Mixing is then done during grape crushing, mash pumping and filling of the press.

Before adding SIHA Gelatin Liquid fining agent to the beverage to be fined, it should be agitated with a high-performance mixer. Then slowly add the gelatin solution to the beverage.

In general, the gelatin fining will settle within one day. Flocculation can be improved and accelerated through secondary fining with BEVASIL 30 silica sol fining agent or SIHA Bentonite fining agents (all types).

Combination of fining agents

Particularly for clarification of must and young wines, we recommend combining SIHA Gelatin Liquid fining agent with negatively charged flocculation agents. The combination of SIHA Gelatin Liquid fining agent with BEVASIL 30 silica sol fining agent has been tried and tested. As a general guideline a ratio of 1:5 to 1:10 (gelatin to silica sol) is recommended. The exact ratio should be determined in a laboratory test.

Product Characteristics

SIHA Gelatin Liquid fining agent is a 20% solution. Five times the quantity of dry gelatin (cold-soluble gelatin) must therefore be used. It can be added directly to the product without any preliminary treatment.

Safety

When used as directed and handled correctly, there are no known unfavorable effects associated with this product.

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

Storage

SIHA Gelatin Liquid fining agent is produced with extreme care. It is stabilized, but has only a limited shelf life. Open packages should be used up quickly. Unopened packages should be stored in a cool place

Delivery Information

SIHA Gelatin Liquid fining agent is sold under article no. 97.101 and is available in the following package sizes:

2.2 lb (1 kg)	PE bottle
13.2 lb (6 kg)	PE canister
55.1 lb (25 kg)	PE canister
2,205 lb (1,000 kg)	one-way tank on request

Certified Quality

SIHA Gelatin Liquid fining agent is inspected regularly during the production process to ensure consistently high product quality. These inspections include technical functional criteria as well as safety in accordance with the relevant laws governing the production of foods. Strict controls also take place immediately before and during final packaging.

BEVASIL 30 is a registered trademark of Akzo Nobel GmbH

Powering Business Worldwide

North America
44 Apple Street
Tinton Falls, NJ 07724
Toll Free: 800 656-3344
(North America only)
Tel: +1 732 212-4700

Europe/Africa/Middle East
Auf der Heide 2
53947 Nettersheim, Germany
Tel: +49 2486 809-0

Friedensstraße 41
68804 Altlußheim, Germany
Tel: +49 6205 2094-0

An den Nahewiesen 24
55450 Langenlonsheim, Germany
Tel: +49 6704 204-0

China
No. 3, Lane 280,
Linhong Road
Changning District, 200335
Shanghai, P.R. China
Tel: +86 21 5200-0099

Singapore
4 Loyang Lane #04-01/02
Singapore 508914
Tel: +65 6825-1668

Brazil
Rua Clark, 2061 - Macuco
13279-400 - Valinhos, Brazil
Tel: +55 11 3616-8400

For more information, please email us at *filtration@eaton.com* or visit *www.eaton.com/filtration*

EN
1 B 4.2.5
12-2016