Technical Information

Stabilization SIHA® Gum Arabic Granulate



SIHA Gum Arabic Granulate stabilizer from Eaton's Begerow Product Line is a micro-filtered gum arabic produced from high-quality Arabic rubber. It is comprised mainly of polysaccharides and is traditionally used as a protective colloid against copper or iron turbidities in combination with citric acid (0.03 – 0.04 lb/1,000 gal (0.3 – 0.5 g/hl)), or for crystal stabilization in combination with metatartaric acid.

Special characteristics of SIHA Gum Arabic Granulate stabilizer:

- Micro-filtered, therefore pure and stable
- Highly soluble
- Improves the roundness of wine
- Also suitable for white and rosé wine
- Low colmation index

Application

The colloidal substances present in wine are polysaccharides, polypetides, and polyphenols. The arabinogalactan fraction of the gum arabic forms a film around these particles. The negative load of all particles prevents them from coming into contact with each other. A protective colloidal network is thus formed, in which sedimentation of the disperse particles is prevented, and their tendency for agglomeration is reduced. The high resistance of the colloidal solutions of gum arabic explains their designation as 'protective colloid'. However, the formation of such a network takes rather a long time (4 – 10 hours), which the winemaker should utilize for filtering and bottling the treated wine shortly after the treatment.

If there is insufficient time to do this, it is advisable to add the product a few days prior to bottling.

Important note: If the gum arabic concentration is not sufficient, gaps form in the colloidal network. Water bridges are formed between the gum arabic molecules, and the protective effect is gradually reduced, which may lead to undesirable turbidities through flocculation of the colloid particles.

Product Characteristics

Gum arabic (E 414) originates from natural excretions or from the healing process of damage to the bark of the leguminous plant *Acacia Seyal*. It consists of L-arabinose, D-galactose, L-rhamnose, and D-glucuronic acid. An initial high colloid content in the wine can lead to problems during filtration, particularly during final filtration via membrane filter cartridges. The reason is that the addition of SIHA Gum Arabic Granulate stabilizer (also a colloid) causes a short-term increase in the colloid content of the wine, which may lead to blockage of the

In order to avoid this, SIHA Gum Arabic Granulate stabilizer should be added at least 72 hours before membrane filtration. If it is applied after final filtration directly before bottling, it must be added in the form of a 20% solution.

The addition of SIHA Gum Arabic Granulate stabilizer leads to color stabilization in red and rosé wines. As a side effect, the so-called "mouth feeling" of the wine is also improved.

Dosage

membranes.

The dosage depends on the type of wine and the application.

Dosage: 0.83 - 2.5 lb/1,000 gal (10 - 30 g/hl)

Safety

When used and handled correctly, there are no known unfavorable effects associated with SIHA Gum Arabic Granulate stabilizer.

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

Storage

SIHA Gum Arabic Granulate stabilizer should be stored in a cool, dark, and dry place.





Delivery Information

SIHA Gum Arabic Granulate stabilizer is sold under article no. 65.122 and is available in the following package sizes:

2.2 lb (1 kg) aluminum bag
55.1 lb (25 kg) paper bag
HS Customs Tariff: 1301 20 00

Certified Quality

SIHA Gum Arabic Granulate stabilizer is constantly monitored during the production process to ensure consistently high quality. These inspections include technical functional criteria as well as safeness in accordance with relevant laws governing production of foods. Strict controls are additionally carried out immediately prior to and during final packaging.

North America - HQ

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

Europe/Africa/Middle East

Auf der Heide 2 53947 Nettersheim, Germany Voice: +49, 2486, 809-0

Voice: +49 2486 809-0

Internormen Product Line Friedensstraße 41 68804 Altlussheim, Germany

Voice: +49 6205 2094-0

Begerow Product Line An den Nahewiesen 24 55450 Langenlonsheim, Germany

Voice: +49 6704 204-0

Brazil

Av. Julia Gaioli, 474 - Bonsucesso 07251-500 - Guarulhos Brazil

Voice: +55 11 2465 8822

China

No. 7 Lane 280 Linhong Road, Changning District, Shanghai 200335, China Voice: +86 21 5200 0422

Singapore

4 Loyang Lane #04-01/02 Singapore 508914

Voice: +65 6825 1668

For more information, please e-mail us at filtration@eaton.com or visit us online at eaton.com/filtration for a complete list of Eaton's filtration products.

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

© 2013 Eaton Corporation. All Rights Reserved. All trademarks and registered trademarks are the property of their respective owners.

All information and recommendations appearing in this brochure concerning the use of products described herein are based on tests believed to be reliable. However, it is the user's responsibility to determine the suitability for his own use of such products. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by Eaton as to the effects of such use or the results to be obtained. Eaton assumes no liability arising out of the use by others of such products. Nor is the information herein to be construed as absolutely complete, since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.

