#### Technical Information

# **Beverage Stabilization Potassium Disulphite**

# SIHA

## Stabilizer

Potassium Disulphite stabilizer (Potassium Metabisulphite) from Eaton's Begerow Product Line is predominantly used for sulfurizing mashes, musts and young wines.

The specific advantages of Potassium Disulphite stabilizer:

- Little unwanted odor during application
- Powder form for easy handling and dosage
- Exact dosage possible

#### **Application**

Potassium Disulphite stabilizer can be used with very good results to sulfurize grape mashes. The product can be sprinkled directly over the grapes and worked in evenly while they are being crushed. It can also be used dissolved in water. In comparison to aqueous SO<sub>2</sub> solutions, there is significantly less SO<sub>2</sub> gas released

Application of Potassium Disulphite stabilizer to the grapes achieves a good surface protection with a long stand time of the mash. This is particularly important during harvesting in warmer weather.

It is very suitable for preservation in the tank. First, the tank has to be filled with a solution consisting of water and approx. 8.3 lb/1,000 gal (100 g/hl) citric acid. Then about 4.7-8.3 lb/1,000 gal (50 -100 g/hl) (= 2-4 lb/1,000 gal (250 -500 mg/l SO $_2$ )) Potassium Disulphite stabilizer is mixed evenly into the solution.

Potassium Disulphite stabilizer should not be used for sulfurizing wine that has already been processed because the potassium deposits remaining in the wine can alter the wine's stability.

# Dosage

When using Potassium Disulphite stabilizer it must be considered that only about 50% of the weight is made up of  $SO_2$ . Thus, about twice as much Potassium Disulphite stabilizer is always needed as compared to  $SO_2$  addition.

The quantities in the table can serve as standard values.

Product	Potassium Disulphite Ib/1,000 gal (g/hl)	SO₂ dosage
Mash sulfurization:		
healthy white grapes	0.2 – 0.8 (2 – 10)	0.08 - 0.4 (1 - 5)
healthy red grapes	0.3 – 1 (4 – 12)	0.2 - 0.5 $(2 - 6)$
unhealthy white grapes	0.6 – 1 (8 – 12)	0.3 - 0.5 $(4 - 6)$
unhealthy red grapes	0.8 – 1.2 (10 – 14)	0.4 - 0.6 $(5 - 7)$
Must sulfurization, with rotten grapes (only necessary if mash sulfurization was not done)	0 – 0.7 (0 – 8)	0 – 0.3 (0 – 4)

For fruit wines, the maximum quantity of 1.67 lb/1,000 gal (200 mg/l), calculated as SO<sub>2</sub>, must not be exceeded in the bottled finished product.

Potassium Disulphite stabilizer is best dissolved in a quantity of must that should not be too small. This is then stirred into the lot to be treated. Since SO<sub>2</sub> solutions are heavier than wine, they should be stirred in evenly and thoroughly after being added.

#### **Product Characteristics**

Potassium Disulphite stabilizer hydrolyzes in an acid solution into two molecules of SO<sub>2</sub> and the potassium salt of the acid that is present, according to the formula

$$K_2S_2O_5 + H_2Ac = 2 SO_2 + K_2 Ac$$

In the process, about half of the weight of the  $SO_2$  is released. The dried product is easy to sprinkle and can be easily handled because there is only minimal release of  $SO_2$ .

In dampness, Potassium Disulphite stabilizer gradually disintegrates by giving off  $SO_2$ . In acid solutions, this disintegration takes place very rapidly. The small amount of potassium found in the salt is released into the treated must or wine.





#### Storage

Even at correct storage conditions, Potassium Disulphite stabilizer shows a tendency for the formation of lumps. This does not affect the efficiency of the product.

#### 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.

### **Delivery Information**

Potassium Disulphite stabilizer is sold under article no. 64.101 and is available in the following package sizes:

0.11 lb (50 g) paper bag

2.2 lb (1 kg) laminar aluminum foil 25 x 2.2 lb (1 kg) in cardboard box

22.05 lb (10 kg) bucket

Potassium Disulphite stabilizer is sold under article no. HW.013 and is available in the following package sizes:

55.1 lb (25 kg) PE bag HS Customs Tariff: 2832 20 00

# 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

**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

#### **Certified Quality**

Potassium Disulphite stabilizer is monitored regularly during the production process to ensure consistently high quality. These inspections cover technical function criteria as well as compliance with the law governing the production and sale of foodstuffs. Strict controls are also carried out immediately before and during final packing.

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 Filtration 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.

