

## Beverage Stabilization

### Potassium Disulphite

#### Stabilizer

**Potassium Disulphite stabilizer (Potassium Metabisulphite) 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<sub>2</sub>)) 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<sub>2</sub>. Thus, about twice as much Potassium Disulphite stabilizer is always needed as compared to SO<sub>2</sub> addition.

The quantities in the table can serve as standard values.

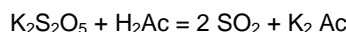
Product	Potassium Disulphite lb/1,000 gal (g/hl)	SO <sub>2</sub> dosage
Mash sulfurization:		
healthy white grapes	0.2 – 0.8 (2 – 10)	0.08 – 0.4 (1 – 5)
healthy red grapes	0.3 – 1 (4 – 12)	0.2 – 0.5 (2 – 6)
unhealthy white grapes	0.6 – 1 (8 – 12)	0.3 – 0.5 (4 – 6)
unhealthy red grapes	0.8 – 1.2 (10 – 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



In the process, about half of the weight of the SO<sub>2</sub> is released. The dried product is easy to sprinkle and can be easily handled because there is only minimal release of SO<sub>2</sub>.

In dampness, Potassium Disulphite stabilizer gradually disintegrates by giving off SO<sub>2</sub>. 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**

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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**

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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**

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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
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### **Certified Quality**

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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.