

Inspiring innovation.



SO₂ REMOVAL WITH H₂O₂

 $H_2O_2 + SO_2 - \rightarrow SO_4 + H_2O$ (34) (64)

1 Part H₂O₂ removes 2 parts SO₂ as Free.

 H_2O_2 removes SO_2 as Free. Note: It is important to add slowly in stages to reduce oxidation of wine. Equilibrium shifts Total SO_2 ---> Free SO_2

Calculation

To remove 50ppm Free SO₂ in 60 gallons (barrel):

(0.05g/L)(3.785 L/gal)(60) = 11.36 g SO₂

 $\frac{11.36}{2}$ = 5.68 g H₂O₂ needed

 $\underline{5.68a}$ = 0.189L 3% H2O2 needed to reduce Free SO2 by 50 ppm/barrel 30g/L (ie, 3% = 30 g/L)

Method

- 1. Determine Free SO₂ of wine
- 2. Determine level desired
- 3. Calculate H₂O₂ needed to drop Free SO₂
- 4. Add slowly, in stages to wine
- 5. Resample & check, repeat according to amount of Free shifted from Total

The indications supplied are based on our current knowledge and experience, but do not relieve the user from adopting the necessary safety precautions or from the responsibility of using the product(s) properly.

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