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Vinegar Infos

Desulfurization

Before using raw materials, as for instance white wine, red wine and fruit wine, their SO₂ content (**total sulfurous acid**) has to be controlled. Only a content of less than 10 - 20 mg/l is harmless for the bacteria and consequently for the fermentation.

Desulfurization is done by hydrogen peroxide (H₂O₂) 30% with a density of 1.12.

For desulfurization 5g H₂O₂ 30%ig (corresponding to 4.5ml) per 1g SO₂ are required.

Reaction: I. H₂O₂ + SO₂ -> H₂O + SO₃
 II. H₂O + SO₃ -> H₂SO₄

As H₂O₂ is very toxic for the bacteria, but at the same time decomposes relatively quickly, **this treatment must be carried through at least 24 hours before the raw material is used for fermentation.**

Furthermore a second analysis has to be made after 24 hours, to find out whether the sulfurous acid has completely oxidized. Should this not be the case, desulfurization has to be repeated.

Example:

The wine sample contains 73mg SO₂/l = 0.073g/l

Per 1g SO₂ ; 4.5ml H₂O₂ 30%ig have to be added,

i.e. for 1 litre sample 0.073 * 4.5 = 0.33 ml H₂O₂
or for 25 litre sample 0.073 * 25 * 4.5 = 8.22 ml H₂O₂