

SULPHUR DEFECTS

What are sulphur defects?

Yeast have the capability to produce compounds that contain sulphur during fermentation. These compounds are normally noted for their strong unpleasant odours. Smells can include but are not limited to rotten egg, perm solution or burnt matches.

Why does the yeast create these compounds?

Yeast normally create sulphur compounds when they have undergone stress during fermentation. The following are sources of stress for wine yeast.

- 1. Yeast are pitched into a high temperature must
- 2. Yeast are pitched into a contaminated must
- 3. Fermentation temperature is too high
- 4. There are large variations in temperature during fermentation
- 5. There is insufficient oxygen in the must and the yeast are asphyxiated
- 6. Too much yeast is added to the must
- 7. There is insufficient nutrients in the must

How do I avoid sulphur compounds?

- 1. Maintain a fermentation temperature between 20 25 °C or 70 80 °F
- 2. Ensure a clean primary fermenter
- 3. Only add the one pack of yeast provided in the kit. If experimenting with other yeasts, determine the nitrogen and nutrient requirements of the yeast

My wine smells like rotten eggs, can it be saved?

The first sulphur compound normally produced by stressed yeast is hydrogen sulphide which smells like rotten eggs. This is a very volatile compound and can usually be removed. Immediately rack the wine to a clean carboy and stir extensively to introduce as much oxygen to the must as possible. Continue racking and stirring until the smell is gone. If there is no decrease in the aroma after several rackings, it is likely too much of the sulphur has linked with other compounds and it may not be possible to remove.

My wine smells like sulphur, but not rotten eggs. Can it be saved?

The sulphur compounds in the wine have most likely linked with other compounds in the wine. It is highly unlikely that it can be removed at this stage of its development. Attempt to introduce oxygen through racking and stirring but there is little chance of successfully saving the wine.

For further information on craft winemaking, visit <u>www.rjscraftwinemaking.com</u>.