

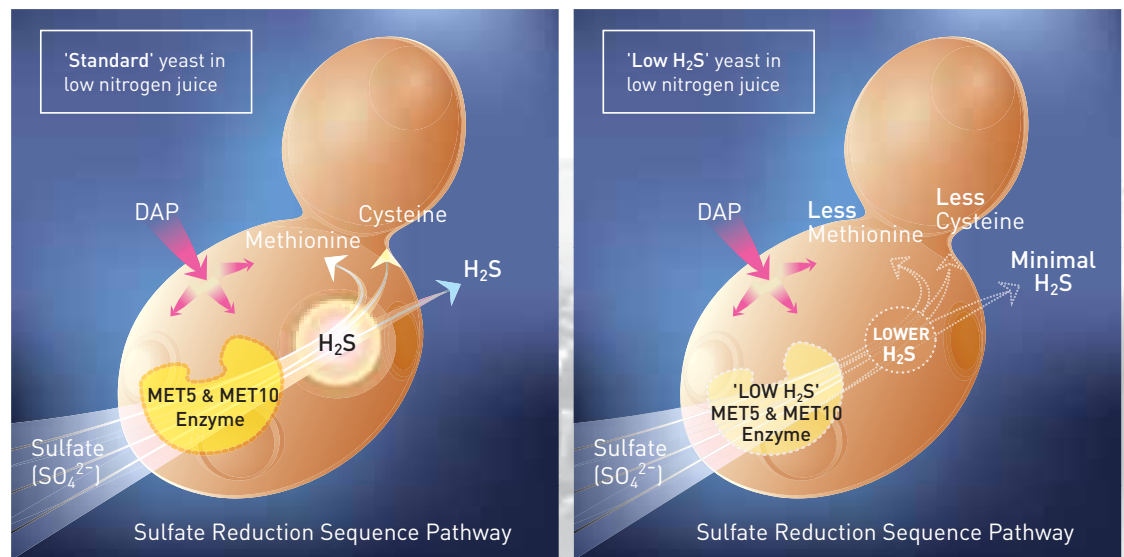
LOW HYDROGEN SULFIDE YEAST

Hydrogen sulfide in wine

The production of hydrogen sulfide (H_2S) during grape juice fermentation is a negative attribute for wine quality. It can be produced by yeast when there are inadequate sources of available nitrogen for the yeast to metabolise. H_2S -containing wines are unpleasant, resemble a rotten-egg gas odour and require copper fining. To overcome this problem, winemakers add di-ammonium phosphate (DAP) during fermentation, and even then they may have to use copper to remove H_2S from the final wine. Not only does H_2S reduce wine quality, but just as importantly it masks all the positive aromatics in the wine. What is the optimal solution?

Yeast eliminate H_2S detection in wine

The Australian Wine Research Institute (AWRI), together with Maurivin, have now developed new wine yeast strains that produce undetectable amounts of H_2S to the human nose. These non-GMO, patent-pending Next Generation yeast called *Maurivin Advantage*, *Maurivin Distinction*, and *Maurivin Platinum* have distinct variations in genes encoding the sulfite reductase protein complex, resulting in yeast strains with a reduced capacity to produce H_2S . This is illustrated below.



It is noted that these yeast strains have a reduced capacity to produce the amino acids methionine and cysteine. However, grape juice contains sufficient quantities of these amino acids to undertake normal growth and metabolism during fermentation.