

SUPREMECORQ X2 MIRROS WINE PRESERVATION PERFORMANCE OF HIGH-GRADE NATURAL CORK OVER 2 YEARS

INDEPENDENT TRIAL CONDUCTED BY THE AWRI (Australian Wine Research Institute)

The internationally renowned Australian Wine Research Institute (AWRI) has been a leading driver of research into wine closure performance, particularly since their ground-breaking comparative closure study launched in 1999. This study showed that natural corks suffered from variability and sometimes caused TCA contamination in the wine, however neither the synthetic closures nor screwcaps in the study matched their wine preservation performance, showing signs of oxidation or reduction respectively. In the intervening decade closure companies have invested in research and development projects designed to improve the wine preservation performance of their closures. This new report from the AWRI shows that whilst screwcaps continue to suffer from aromas associated with reduction, wine sealed with SupremeCorq X2 has an identical sensory profile to wine sealed with high-grade natural cork.

Methodology

For each closure type, 300 bottles of 2007 Clare Valley Semillon from a leading global wine producer was bottled at one of the leading contract bottling companies in Australia on May 16th, 2007. Samples of the wine with each closure type were stored in controlled cellar conditions (17°C temperature and 55% humidity) in an inverted position. The wine underwent chemical and sensory analysis at 6, 12, 18 and 24 months after bottling.

Free SO₂

Over the first 6 months in bottle, free SO₂ levels in the wine sealed with all closure types showed a rapid decrease, consistent with experience in other studies, where the dissolved oxygen in the wine and oxygen remaining in the headspace immediately after bottling combine with available free SO₂.

At subsequent time intervals, the concentration of free SO₂ measured for each closure type was consistent with what is already known about their different levels of permeability – the screwcap being least permeable to oxygen resulted in the highest free SO₂ concentration, the natural cork and the SupremeCorq X2 having similar levels of free SO₂ as a result of having similar permeability to oxygen.

Sensory analysis

Sensory analysis of the wine with different closures took place under extremely controlled conditions at the AWRI's sensory facility during May 2009. The panel first determined 19 different

sensory attributes then proceeded to rate samples of the wine with each closure type.

Over the 19 different sensory attributes which were rated, there were no differences in the scores given to the wine sealed with the high-grade natural cork and the SupremeCorq X2 – the wines tasted the same.

The wine sealed with the screwcap differed from that sealed with the natural cork on 4 of the 19 sensory attributes, with the greatest differences being for the attributes 'reductive palate' and 'struck flint aroma'. In fact the struck flint aroma was the dominant aroma attribute of all the samples analysed – no other aroma attribute for any closure type was rated as strongly as struck flint for the screwcap. Again, this analysis confirms that the level of oxygen permeability offered by screwcap closures is insufficient to avoid reductive characteristics developing during the normal storage period for quality wines.

This new study confirms the continued differences in wine preservation performance which result from the use of different types of closures – winemakers need to be aware of the risks of reduction resulting from the use of screwcaps. In both chemical and sensory analysis the SupremeCorq X2 performed virtually identically to the Reference 2 natural cork, offering a consistent and taint-free closure without compromising on wine character.

This independent study by the AWRI confirms the very significant improvement in synthetic closure performance since the 1999 AWRI closure trial and the continued undesirable sensory modification of wines sealed with screwcaps.

Clare Valley Semillon has long been appreciated as a wine which develops over time when sealed with a high-grade natural cork. Wine producers the world over now know that in the SupremeCorq X2 they have a TCA-free alternative to natural cork which requires no modification to their packaging and which allows their wines to develop in the way that helped them become loved and respected in the first place.

The SupremeCorq X2 is the only second-generation synthetic closure which offers the same oxygen permeability and wine preservation performance as a high-grade natural cork. Available in 38mm and 45mm lengths and in an almost limitless range of color and print options, the SupremeCorq X2 is the synthetic closure of choice for such world-renowned wineries as Constellation Wines, Fetzer, Sichel, Mezzacorona and many others around the globe.



The AWRI (Australian Wine Research Institute) is a renowned research facility financed by the Australian wine industry.



SUPREMECORQ®