

# Combating Black Winery Mould

## Fiera Group Australia Topics for discussion and consideration

Thin film technology the engineered answer to address Black Mold growth on and inside Australian Wineries.

1/. Unanswered events surrounding Black Mold on modern winemaking structures 1970 to 2012

Refer Photos No 1 + A+B +C

2/. Conclusions and methods allowing initial design of and selection of the correct thin film coating

Refer Photos No 2

Refer Photos NO 3 + A

3/. The 2013 trial site , method of trail and observations Explain test area then proceed to Video

Refer Photos No 4 + A

Link to U Tube Wipe test

4/. Supporting Theories , conclusions and observations relating to mold arrival , mold and bio film formation , current practices to explain why Mold reoccurs and what must be avoided addressing mold in the wine industry. Poisons, Chemicals and Silicones.

Refer Photos No 5 + A + B

5/. A brief outline of how the engineered product changed a surface mold once grew upon

Refer Photos No 6 + A + B

6/. Life cycle and engineering suitability. Batf China and Fiera group Australia

Refer Photos No 7 + A + B + C + QLV tester and standards it addresses

7/. Short term maintenance Verses long term comparisons .

Energy , Water Labour

Spread sheet No 8

If time permits present results P 1 to 8

**1A**



**1B**



**1C**





3,

4A



2013

Fiera Group Australia  
+ 61 417 808 816

MS 722 in 2017 has provided the Australian Wine Industry the first ever long term answer stopping recurring Black Mold.

Partially by design and testing BACTY China & Fiera Group Australia proudly confirms the Mold Index of 2013 to 2017 reached a 100% reduction of mold 100% stability of the film in all external conditions.

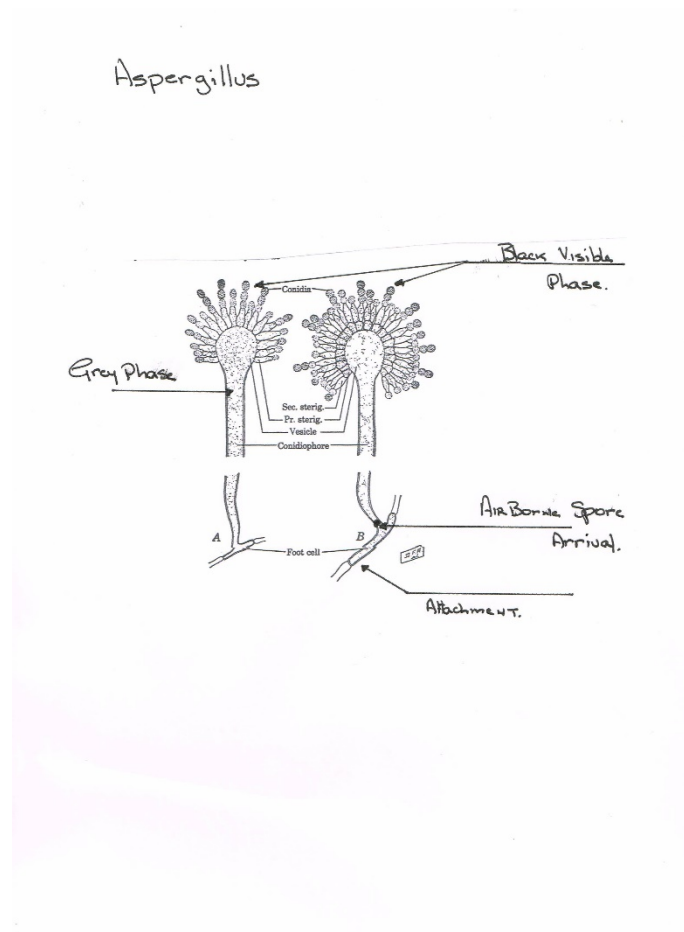
When evaluating ocular life without Black Mold for the first 6 years, this ocular no mold and a fast simple recoating technology eliminating any need to wash again.



2018



5





## 5B

## MS 727 Observed Mold Growth cycle

Mudgee NSW

Acceptable period

Clean  
Test  
period

Reapplication Period , cured depth .48 Um , start eroding coating at 6.8 um / year Life cycle 7.05 years

MS  
727

Jan	Feb	March	April	May	June	July	August	Sept	Oct
Black	Black	Black	Black	Black	Black	Black	Black	Pressure wash	Pressure wash
Attach	Attach	Attach	Attach	Attach	Attach	Attach	Attach	Attach	Attach
								Condiophore or spore arrival on MS 727	Disturb Early condiophore attachment

2012 / 2013

Apply 727 Feb 15<sup>th</sup> 2013

Nov	Dec	Jan	Feb	March	April	May	June	July	August
Clean	Clean	Clean	Clean	Clean	Clean	Clean	Clean	Clean	Clean
Attach	Attach	Attach	Attach	Attach	Attach	Attach	Attach	Attach	Attach

2013 / 2014

Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June
Clean	Clean	Clean	Clean	Clean	Clean	Clean	Clean	Clean	Clean
Attach	Attach	Attach	Attach	Attach	Attach	Attach	Attach	Attach	Attach

2014 / 2015

Reapply over test area Sept 11<sup>th</sup> 2015

July	August	Sept	Oct	Nov	Dec	Jan	Feb	March	April
Clean	Clean	Clean	Clean	Clean	Clean	Clean	Clean	Clean	Clean
Attach	Attach	Attach	Attach	Attach	Attach	Attach	Attach	Attach	Attach

2015/ 2016

May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb
Clean	Clean	Clean	Clean	Clean	Clean	Clean	Clean	Clean	Clean
Attach	Attach	Attach	Attach	Attach	Attach	Attach	Attach	Attach	Attach

2016/ 2017

March	April	May	June	July	August	Sep	Oct	Nov	Dec
Clean	Clean	Clean	Clean	Clean	Clean	Clean	Clean	Clean	Clean
Attach	Attach	Attach	Attach	Attach	Attach	Attach	Attach	Attach	Attach

2017/2018

6,

6A



6B



7



## Common QUV Test Cycles

The QUV conforms to a large number of national, international and industry specifications, including but not limited to:

- \* ASTM D4799
- \* ASTM D6662
- \* ASTM G154
- \* ASTM D4587
- \* EN 927-6
- \* ISO 11507
- \* ISO 4892-3
- \* SAE J2020
- \* J15 K 5600-7-8
- \* AATCC TM186



Test specimens are mounted on both the front and back side of the QUV, providing a large sample capacity.

## Versatile Specimen Mounting

Easy-to-use specimen holders adjust for any thickness up to 3/4" (20 mm) and allow fast, snap-action specimen mounting. Retaining rings provide positive hold-down and do not require that test specimens be cut to close tolerance. In addition, custom holders are available for mounting various products, such as lenses and 3-D components.

## Specimen Mounting

### Specimen Holders

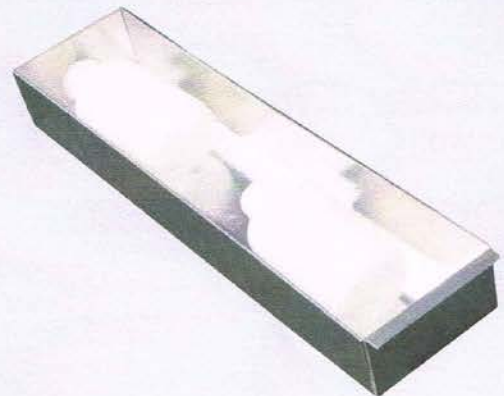
- \* 2 flat panels per holder
- \* Standard size 3" x 6" (75 mm x 150 mm)
- \* Mount 3-D parts with special holders
- \* 4" x 6" (100 mm x 150 mm) also available

### Specimen Capacity

- \* 48 standard size specimens for QUV/se, QUV/spray and QUV/cw
- \* 50 standard size specimens for QUV/basic



The QUV can accommodate a variety of 3-D specimens, including automotive parts, lenses, bottles and CDs.

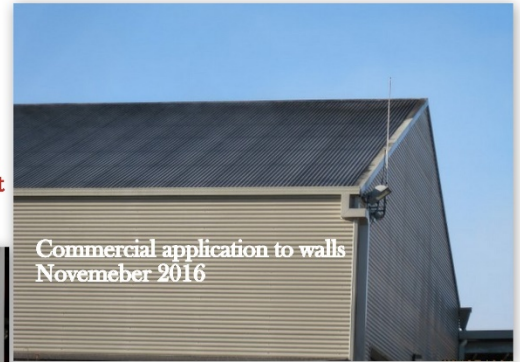


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**P1**



**MS 727 Feild Trial result  
2011 to 2016**



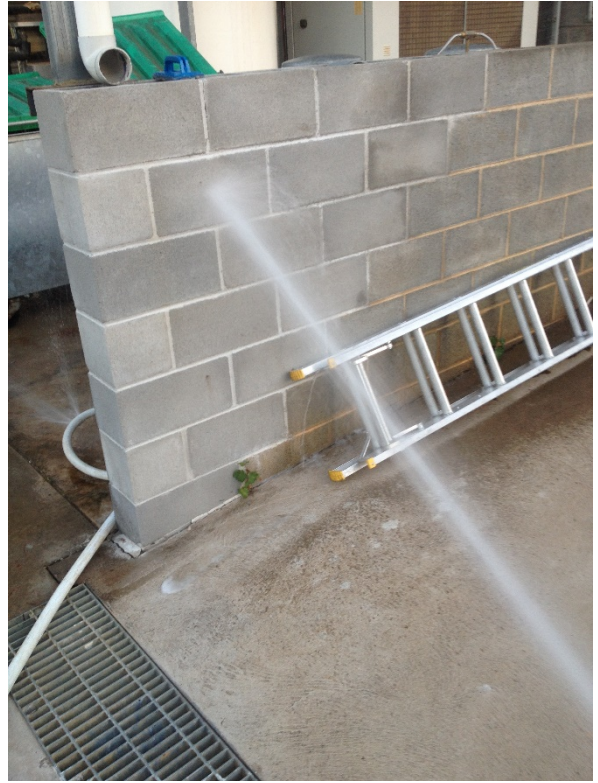
**P2**



**P3**




**P4**



**P5**



**Fiera Group Australia** Clean and protect like no others can. We give you back your colour.



wash 6 ltrs      apply 3.5 ltrs

**MS 720 applied to natural wood to allow 'True' re-finished colour.**  
Not a stain used to protect the solvent based materials.  
Protect wood like no other product can with a 6 year guarantee  
10-40 to +125 degrees.

**Fiera Group Australia**  
Clean and Protect  
We provide superior service.



A      B      C

Typical Mold regrowth 3 years

Clean and protected for 6 years + returns of original colour

Washed Only Sun damage

The MS 727 difference  
Clean, reflective efficient.  
At home with Australia's awarded wineries.



**MS 727** If you choose a colour that suffers from Sun damage, we can bring back that colour!



**2013 to 2017**