OXIRA

a brand of the
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Efficacy Test:

Royal Melbourne Inst of Technology

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Executive Summary

A random batch of OXIRA units were submitted to the Royal Melbourne Institute of Technology (RMIT) for testing for its efficacy on reducing airborne bacteria.
The laboratory carefully selected two commonplace bacteria that is often found in our daily life – E.Coli and Salmonella.
After a period of controlled testing, **it was shown that the OXIRA units effectively restricted the spread of both common bacteria.**

About the Laboratory

Royal Melbourne Institute of Technology is a global university of technology and design and Australia's largest tertiary institution. The University enjoys an international reputation for excellence in practical education and outcome-oriented research. RMIT offers testing services at its facilities, and was chosen for our test.

Methodology

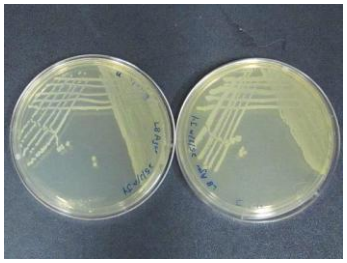
Two enclosures of exact dimensions were chosen and placed side by side.
Holes of identical size were introduced to both enclosures to allow a small amount of circulating fresh air.
Enclosure A is used to test the effectiveness of the OXIRA, and as such a unit was placed in it.
Enclosure B is used as the Control, with no OXIRA units placed inside. This is to compare the results later.
A petri dish of E.coli culture was then placed in each enclosure.
Photos of both petri dishes were taken periodically.
After the tests with E.coli were completed, both enclosures were sanitised and prepared for the second test, using cultures of Salmonella.

Results

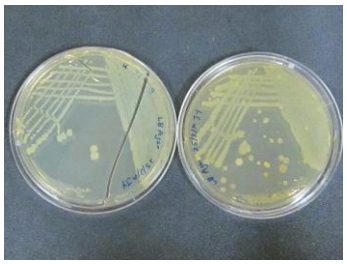
After a lapse of 8 days, photos of both types of bacteria have shown the air in Enclosure A has markedly impeded the spread of the culture in the petri dish. This has shown that the air in Enclosure A has been effectively treated by the germicidal ultraviolet tube in the OXIRA unit.

Photos

Escherichia coli (E.coli)

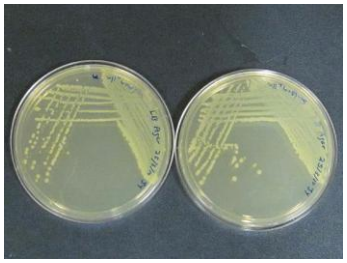


Day 1 showing the start of the test.

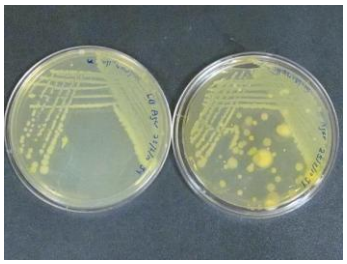


Day 8 showing the left petri dish had a lot less bacteria growth.

Salmonella



Day 1 showing the start of the test.



Day 8 showing the left petri dish had a lot less bacteria growth.

As the photos have shown;
The petri dishes on the LEFT hand side were exposed to OXIRA-treated air and has impeded culture growth.
The petri dishes on the RIGHT hand side, *without* the OXIRA unit, had a lot more bacteria growth.

Conclusion

The tests have been carefully planned together with the laboratory, and it has shown that the presence of the OXIRA unit has effectively reduced the growth of two very common bacteria. These two bacteria have been chosen because of their commonplace in our daily lives.

Thanks

OXIRA would like to express appreciation and gratitude for the time and effort of all the staff at the Royal Melbourne Institute of Technology.
Especially for the time and supervision by the Head of Laboratory (Medical Sciences), Professor Denise Jackson.

Final Thoughts

This test was performed for in-house purposes only. The efficacy of germicidal ultraviolet tubes is undisputed. It must be let known that OXIRA only uses ultraviolet tubes from Heraeus GmbH, one of the largest and oldest companies specialising in ultraviolet tubes. Germicidal ultraviolet tubes have been used since the 1900s and are still very widely used today.

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