



# BQSAS Polyrey High Pressure Laminate (HPL) Sample Boards Material Compatibility Testing Report

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## **Summary**

Two HPL sample boards were tested with a third one being kept as a control sample. They were exposed to 40 room Hydrogen Peroxide Vapour (HPV) decontamination cycles. No changes were seen to the front faces of the samples during or after 40 cycles. These samples are therefore considered to be compatible with Bioquell’s HPV room decontamination systems.

## **Aims**

To determine the compatibility with Hydrogen Peroxide Vapour (HPV) of the samples provided.

## **Method**

Three HPL sample boards from Polyrey were provided by BQ SAS for testing. Identification of the samples was:

'HPL 3 mm B070'

Ref: 0541550

HPL B 070 FIA O

030 STD / EQ.P

No further technical details regarding the samples was provided.

Photographs were taken of the samples before testing.

A Bioquell ProteQ (Serial No: 201808PQ6223) was placed in a room of the following dimensions: 3.1m x 2.5m x 3.5m which had the total volume of 27m<sup>3</sup>. Three Bioquell BQ-50 aeration units were connected wirelessly to the ProteQ and used to reduce the aeration time.

A total of 40 timed gassing cycles were run. The room was returned to an ambient temperature of 20 to 25°C, relative humidity of 35 to 65% and <10 ppm H<sub>2</sub>O<sub>2</sub> before the start of each cycle.

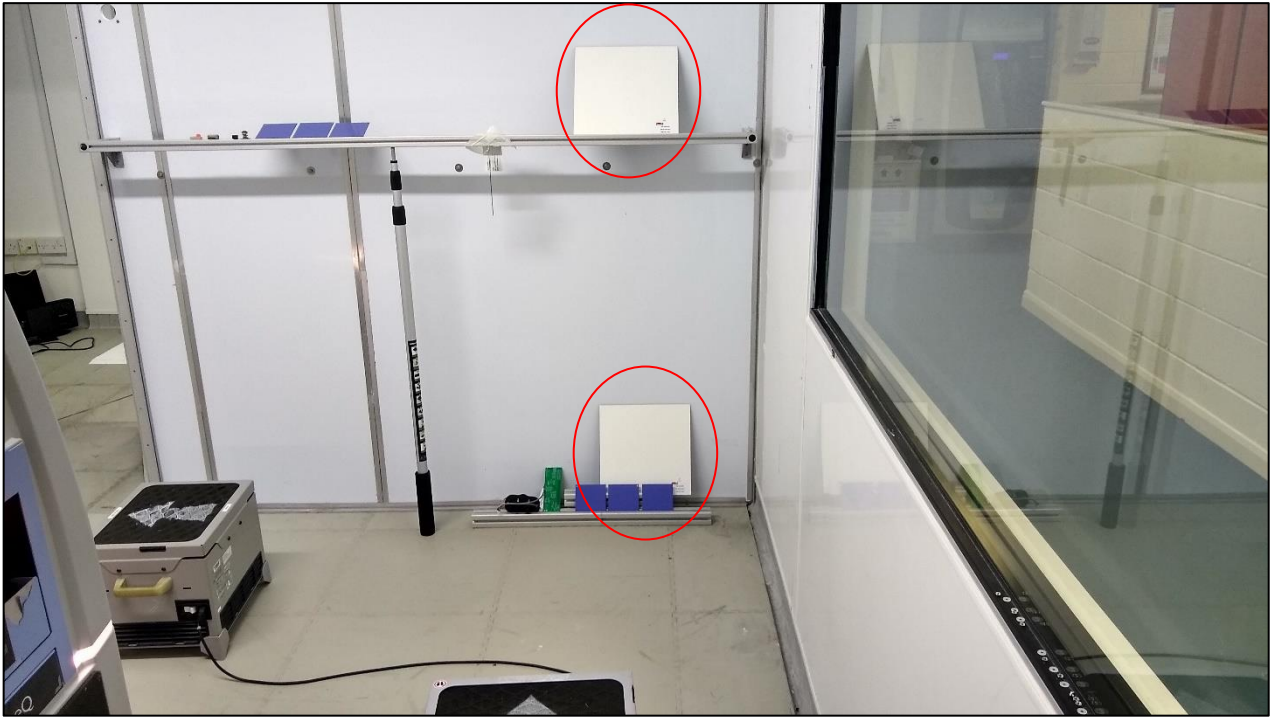
The cycles were run with the following parameters in accordance with TD041-SOP-001;

- Gassing: 16.25 minutes at 16g/min injection (260g)
- Dwell: 25 minutes (1,500 seconds) at 5g/min injection
- Aeration: End when the test room is <10ppm H<sub>2</sub>O<sub>2</sub>
- Total Dose: 385g (14.2g/m<sup>3</sup>)
- Consumables: Bioquell 35% Hydrogen Peroxide (Lot: ABF0950010120991)

The samples were inspected periodically throughout the testing. At the end of the 40 cycles, the samples were visually examined and photographed.

## Layout

Sample 1 was placed at ground level and sample 2 at nozzle height as shown in the photo below; an aeration unit was positioned to distribute HPV preferentially towards them during gassing.



**Figure 1 Samples in test room**

## ***Results***

No visible changes were observed to the front face of the samples during or after testing.

## ***Conclusion***

It has been found by Bioquell that 40 cycles at 14g/m<sup>3</sup> will determine with a high degree of confidence whether products are susceptible to deterioration from exposure to HPV.

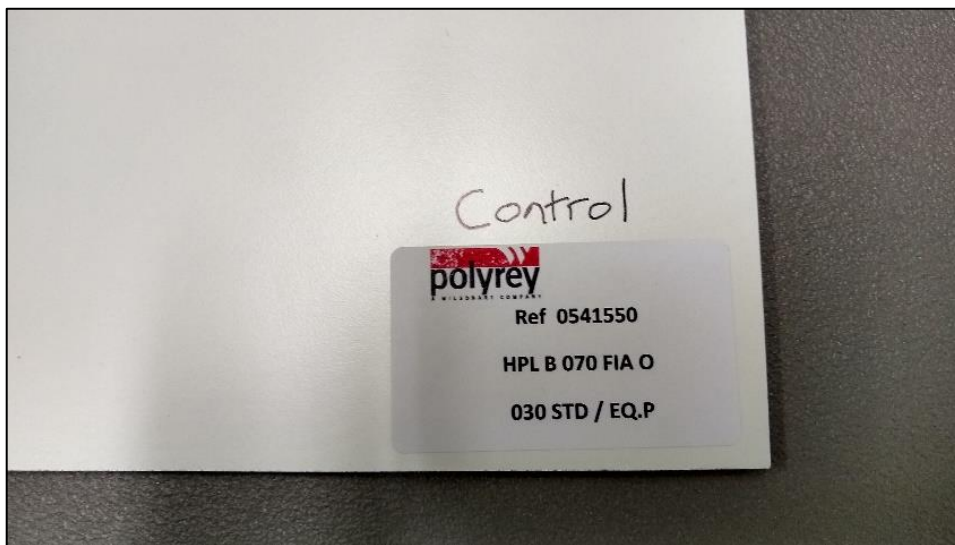
The samples provided were found to be compatible with Bioquell's HPV room decontamination systems, showing no signs of change after the 40 cycles.

## Appendix 1

Photographs before testing:



**Figure 2 Sample fronts before testing**



**Figure 3 Close up of control sample**

## Appendix 2

Photographs after testing:



Figure 4 Sample fronts after testing



Figure 5 Close up of sample 2 and control after testing