



ADVANCE VI TECH (MALAYSIA) SDN. BHD. (895110-W)

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LABORATORY TEST REPORT

REPORT DATE : 15-January-2019
SUBJECT : Standard Practice for Determining Resistance of Plastics to Bacteria
TESTING METHOD : **ATSM G22 Standard Practice for Determining Resistance of Plastics to Bacteria**
TEST CONDUCTED : Malaysia Laboratory

Measurement of bacterial repellent properties on BACTOSTAT PP RP1034

Test Item/Product : BACTOSTAT PP RESIN, GRADE RP1034

Product Manufacturer : The Hong Kong Polymer Science Ltd.

Supplier/Distributor : DragonChem Limited

Test Method: ATSM G22 Standard Practice for Determining Resistance of Plastics to Bacteria

Incubation temperature: 37°C

Incubation period: 28 days

Agar medium: Plate Count Agar

Test Culture: *Staphylococcus aureus* (S.A), concentration around 3.09×10^{10} cells/ml,
OD value:1.124

Test Specimen: 60mm in diameter flat circle of treated and untreated samples.

Test Condition: The sample material was placed in Petri dish. Test bacteria was added to Tryptone Soya Agar.

Signed for on behalf of AVI Bio-Lab

Lai Kuan

Technical Manager



Evaluation of results:

Observed growth rating on the surface of the test specimen.

Incubation Period	Specimen RP 1034	Growth Rating of Test Specimen	Specimen Random PP	Growth Rating of Test Specimen
Day 0-7	1	0	1	0
	2	0	2	0
Day 7-14	1	1	1	1
	2	1	2	2
Day 14-21	1	1	1	4
	2	1	2	4
Day 21-28	1	1	1	4
	2	1	2	4

1. Specimen **RP1034** remain the same from day 7 until day 28.
2. Specimen **Random PP** has increasing growth of S.A on surface area from day 7 until day 14 but remain after day 14.

Rating of growth :

0 = none

1 = Trace of growth (less than 10%)

2 = Light growth (10%-30%)

3 = Medium growth (30%-60%)

4 = Heavy growth (60% to complete coverage)