TEST REPORT: 7191232766-CHM20-01-RC

Date: 11 MAR 2020 Tel: +65 68851345 Fax: +65 67732912
Client’s Ref: 221418693 Email: Randy.CHIN@tuv-sud-psb.sg

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SUBJECT
Antibacterial Activity Evaluation

CLIENT
9&11, Jalan Indah Gemilang 5,
Taman Perindustrian Gemilang,
81800 Ulu Tiram
Johor

Attn: Ms. Siew Kor Shin

SAMPLE SUBMISSION DATE / TEST DATE
17 Feb 2020 / 26 Feb 2020

DESCRIPTION OF SAMPLE
One sample of “Smart Eco-Mediglo” was submitted.

METHOD OF TEST
Based on JIS Z 2801:2010/A1:2012
“Antibacterial products – Test for antibacterial activity and efficacy”.

The test microorganisms used were:

*Staphylococcus aureus* (ATCC 6538P)
*Escherichia coli* (ATCC 8739)
Methicillin-resistant *Staphylococcus aureus* (NCTC 12493)

Size of Coated Sample: 5 cm x 5 cm
Size of Uncoated Sample: 5 cm x 5 cm
Size of film: 4 cm x 4 cm polyethylene film
Volume of test inoculum: 0.2 ml
### RESULTS

<table>
<thead>
<tr>
<th>Test microorganism</th>
<th>Average of the number of viable cells of test microorganism per test piece</th>
<th>Value of Antibacterial Activity (Criteria : Not less than 2.0)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staphylococcus aureus</strong> (ATCC 6538P)</td>
<td>0 hour 100 000 / 24 hours 11 000 000</td>
<td>Blank Less than 10 More than 6.06</td>
</tr>
<tr>
<td>Blank</td>
<td>100 000</td>
<td></td>
</tr>
<tr>
<td>Smart Eco-Mediglo</td>
<td>Less than 10</td>
<td>More than 6.06</td>
</tr>
</tbody>
</table>

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</tr>
</thead>
<tbody>
<tr>
<td><strong>Escherichia coli</strong> (ATCC 8739)</td>
<td>0 hour 120 000 / 24 hours 12 000 000</td>
<td>Blank Less than 10 More than 6.09</td>
</tr>
<tr>
<td>Blank</td>
<td>120 000</td>
<td></td>
</tr>
<tr>
<td>Smart Eco-Mediglo</td>
<td>Less than 10</td>
<td>More than 6.09</td>
</tr>
</tbody>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Methicillin-resistant Staphylococcus aureus</strong> (NCTC 12493)</td>
<td>0 hour 110 000 / 24 hours 1 900 000</td>
<td>Blank Less than 10 More than 5.27</td>
</tr>
<tr>
<td>Blank</td>
<td>110 000</td>
<td></td>
</tr>
<tr>
<td>Smart Eco-Mediglo</td>
<td>Less than 10</td>
<td>More than 5.27</td>
</tr>
</tbody>
</table>
Remarks:

The above test results relate to the samples as received.

__________________________  ____________________________
MS CHUA XINNI              MR RANDY CHIN KOK FEI
HIGHER TECHNICAL           PRODUCT MANAGER
EXECUTIVE                   MICROBIOLOGY
                             CHEMICAL & MATERIALS
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July 2011