Attn: Bernd Neumann  
Rhoba-Chemie GmbH  
Gustav-Winkler-StraBe32a  
33699 Bielefeld  
Germany  

Date: 16-Nov-2011  
SMI/REF: 1110-894  

Product: RhobaAIR CARPET CLEANER (1025102) (received 02-Nov-2011)  
Dilution: As received  

AMS 1630C  
CLEANER, CARPET Shampoo Type  

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<th>Conforms</th>
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Respectfully submitted,  
Patricia D. Viani, SMI Inc.

SCIENTIFIC MATERIAL INTERNATIONAL  
www.smiinc.com
3.2.1 **Solubility:** Cleaner shall be readily miscible with both hard and soft water and shall produce no detectable precipitate, determined in accordance with 3.2.1.1.

*Product was readily miscible with hard and soft water.*
*No detectable precipitate after standing one hour.*

Result: **Conforms**

3.2.2 **Flash Point:** Shall be not lower than 60°C (140°F), determined in accordance with ASTM D 56.

*Product: No flash point observed to 144°F*  

Result: **Conforms**

3.2.3 **Corrosion of Metal Surfaces:**

3.2.3.1 **Sandwich Corrosion:** Specimens of AMS 4045 and AMS 4049 aluminum alloy, after testing in accordance with ASTM F 1110 on cleaner both in the concentrated form and at use dilution, shall not show corrosion worse than control panels tested with ASTM D 1193, Type IV, water.

<table>
<thead>
<tr>
<th></th>
<th>AMS 4045</th>
<th>AMS 4049</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRODUCT</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Control</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Result: **Conforms**
3.2.3.2 **Total Immersion Corrosion:** Cleaner, both in the concentrated form and at use-dilution, shall neither produce evidence of staining, pitting, or discoloration of panels nor cause a weight change of any panel greater than 0.3 mg/cm²/24hrs, determined in accordance with ASTM F 483 on panels of AMS 4037, AMS 4045, and either AMS 4041 or AMS 4049 aluminum alloys.

<table>
<thead>
<tr>
<th>ALLOY</th>
<th>WGT CHG ALLOWED mg/cm²/24hrs</th>
<th>FOUND mg/cm²/24hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 4037</td>
<td>0.3</td>
<td>0.03</td>
</tr>
<tr>
<td>AMS 4045</td>
<td>0.3</td>
<td>0.04</td>
</tr>
<tr>
<td>AMS 4041</td>
<td>0.3</td>
<td>0.02</td>
</tr>
<tr>
<td>AMS 4049</td>
<td>0.3</td>
<td>0.02</td>
</tr>
</tbody>
</table>

Result: **Conforms**

3.2.4 **Effect on Transparent Plastics:**

3.2.4.1 Cleaner, both in the concentrated form and at-use dilution, shall not craze, stain, or discolor MIL-P-25690, Type C, acrylic plastic, determined in accordance with ASTM F 484.

**MIL-P-25690/Type C (4500 psi / 8 hours):**

*Product: No crazing, staining, nor discoloration*

Result: **Conforms**
3.2.4 Effect on Transparent Plastics (continued):

3.2.4.2 The cleaner shall not craze, stain, or discolor AMS-P-83310 polycarbonate plastics, determined in accordance with test procedures specified in ASTM F 484 on specimens stressed for 10 minutes ± 1 to an outer fiber stress of 2000 psi.

**AMS-P-83310 / Polycarbonate (2000 psi / 10 minutes):**

**Product:** No crazing, staining, nor discoloration

Result ______ Conforms ______

3.2.5 Effect on Painted Interior Surfaces: Cleaner, at use dilution, shall neither decrease the hardness of the paint film by more than two pencil hardness levels nor shall it produce streaking, discoloration, or other damage to the paint film, determined in accordance with ASTM F 502.

**Product:** No change in hardness

No streaks, discoloration nor blistering of the paint film

Result ______ Conforms ______

3.2.6 Effect on Carpeting:

*Requirements, materials, and procedures for this paragraph must be agreed upon by the vendor and purchaser, and demonstrated to the purchaser, and are therefore excluded from testing.*

Result ______ Not performed ______

3.2.7 Storage Stability: Cleaner, exposed to heat and cold in accordance with ASTM F 1104, shall show no precipitation, stratification, layering, or separation.

Result ______ Not performed ______