AATCC Mineral Salts Agar is recommended for evaluation of fungicides used on textiles and to study the resistance of textiles to mildew and rot.

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium nitrate</td>
<td>3.000</td>
</tr>
<tr>
<td>Monopotassium phosphate</td>
<td>2.500</td>
</tr>
<tr>
<td>Dipotassium phosphate</td>
<td>2.000</td>
</tr>
<tr>
<td>Magnesium sulphate</td>
<td>0.200</td>
</tr>
<tr>
<td>Ferrous sulphate</td>
<td>0.100</td>
</tr>
<tr>
<td>Agar</td>
<td>20.000</td>
</tr>
</tbody>
</table>

Final pH (at 25°C): 5.6±0.2

*Formula adjusted, standardized to suit performance parameters*

**Directions**

Suspend 27.8 grams in 1000 ml distilled water. Add 7.5 grams of dextrose if the medium is to be used for testing with *Aspergillus brasiliensis*. Heat to boiling to dissolve the medium completely. Dispense in 7 ml amounts in test tubes or 40 ml amounts in bottles or flasks. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

**Principle And Interpretation**

AATCC Mineral Salts Agar is used as per the procedure described by American Association of Textile Chemists and Colourists (1). These procedures are employed for testing a) Initial mildew resistance of textiles, b) Perseverance of mildew resistance, c) Fungicidal potency of textile fungicides testable, Standard Minimum protective concentration, pecenence indices, including resistance to leaching, volatalization and weathering. Cultures used are *Chaetomium globosum* ATCC 16790, *Aspergillus brasiliensis* ATCC 16404 (2).

Ammonium nitrate acts as a nitrogen source. Dipotassium and monopotassium phosphate provides buffering to the medium. Magnesium sulphate and ferrous sulphate are sources of ions that simulate metabolism.

**Quality Control**

**Appearance**
Cream to beige homogeneous free flowing powder

**Gelling**
Firm, comparable with 2.0% Agar gel.

**Colour and Clarity of prepared medium**
Light amber coloured clear to slightly opalescent gel.

**Reaction**
Reaction of 2.78% w/v aqueous solution at 25°C. pH: 5.6±0.2

**pH**
5.40-5.80

**Cultural Response**
Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

**Cultural Response**

<table>
<thead>
<tr>
<th>Organism</th>
<th>Inoculum (CFU)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Aspergillus brasiliensis</em> ATCC 16404</td>
<td>50-100</td>
</tr>
</tbody>
</table>
**Chaetomium globosum**  
**ATCC 16790**

**Storage and Shelf Life**  
Store below 30°C and the prepared medium at 2-8°C. Use before expiry date on the label.

**Reference**  
2. Catalogue of Bacteria and Bacteriophages, 1992, 18th Ed., American Type Culture Collection, Rockville, MD

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