Inorganic antimicrobial agent

Amteclean Z

and

The application products

AMTEC Co., LTD.
Features of “Amteclean Z”

- Silver and Zinc Oxide based inorganic antimicrobial agents.
  - “Amteclean Z” is composed of two metal compounds that have different antimicrobial agents.

- Making two basic grades according to using conditions.
  - 【Grades】 MK-10   MK-12

- Using special formed Zinc Oxide single crystal “Pana-Tetra”.

- Holding in many compound materials.
  - Mixture of a little “Amteclean Z” in resins, paint, filter, cloth, etc. have enough antimicrobial ability.

<table>
<thead>
<tr>
<th>MK-10</th>
<th>Calcium phosphate with silver compound and Zinc Oxide single crystal</th>
</tr>
</thead>
<tbody>
<tr>
<td>MK-12</td>
<td>Boron-silicate-glass with silver compound and Zinc Oxide single crystal</td>
</tr>
</tbody>
</table>
## Antimicrobial ability of “Amteclean Z” compound products

### Moldings of “Amteclean Z” compounding resins

<table>
<thead>
<tr>
<th>Grade</th>
<th>Resins</th>
<th>Bacillus type</th>
<th>Number of living bacillus</th>
</tr>
</thead>
<tbody>
<tr>
<td>MK-12 0.5% compound PP Escherichia coli</td>
<td>0 hrs.</td>
<td>2.1 × 10^5</td>
<td>&lt;10</td>
</tr>
</tbody>
</table>

By film contacting method

### “Amteclean Z” compounding paint

<table>
<thead>
<tr>
<th>Grade</th>
<th>Paint</th>
<th>Bacillus type</th>
<th>Number of living bacillus</th>
</tr>
</thead>
<tbody>
<tr>
<td>MK-10 0.5% compound Acrylic water soluble paint MRSA</td>
<td>0 hrs.</td>
<td>4.1 × 10^5</td>
<td>&lt;10</td>
</tr>
</tbody>
</table>

By film contacting method
Wide application of “Amteclean Z”

**Compound resins**
- Refrigerator
- Cleaner
- Washing machine
- Water cleaner
- Water cleansing toilet
- Remote controller
- Bar-code reader
- Air cleaner, etc.

**Filtration materials**
- Deodorizer
- For fish water tank
- For circulation filtering bath

**Paints**
- Coating materials
- For sickroom’s wall
- For lavatory or bathroom

**Filters**
- Deodorizing filter
- Dust collecting filter
- Woven or non-woven cloth