ACUSOL™ 341 Polymer

ACUSOL™ 341 Polymer is a homopolymer of acrylic acid with an optimized molecular weight to be used in different applications such as: liquid fabric wash, laundry additives, industrial and institutional detergents. It is supplied in liquid form and is fully neutralized.

Features & Benefits

ACUSOL™ 341 Polymer is a key ingredient in laundry detergents and institutional and industrial cleaners. By using this polymer, the detergent manufacturers will enjoy the following advantages:

- Inhibition of crystal growth, thus preventing precipitation of carbonates phosphates or silicates.
- Dispersion of precipitates in the cleaning bath to avoid settling and scaling on surfaces and fibers.
- Improvement of filming maintenance by soil dispersion, which minimize organic components deposition on glass and dishwares.
- Increase of bleach stability especially in chlorinated formulations by binding heavy metals which destabilize chlorine species through catalytic reactions.
- Use in medium alkaline to very alkaline formulations, due to high solubility of ACUSOL™ 341 Polymer in caustic products. Caustics should be added slowly to a water premix containing polymer to avoid high pH gradients.
- Prevents the redeposition of clay sink onto the fabric or hard surface by keeping the particles suspended in the wash bath.

Applications

- Laundry detergents powders, liquids/gels, tablets/unit dose
- Automatic dishwashing powders, liquids/gels, tablets/unit dose
- Hard surface cleaners

Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

<table>
<thead>
<tr>
<th>Property</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical nature</td>
<td>Acrylic homopolymer</td>
</tr>
<tr>
<td>Appearance</td>
<td>Transparent to slightly hazy, yellowish liquid</td>
</tr>
<tr>
<td>Average molecular weight</td>
<td>4500 (Mw)</td>
</tr>
<tr>
<td>Total solids (%)</td>
<td>40.50–41.50</td>
</tr>
<tr>
<td>pH</td>
<td>6.50–7.50</td>
</tr>
<tr>
<td>Viscosity Brookfield (mPa.s), LV, Spindle #2, 60 rpm, 25°C (cP)</td>
<td>200–500</td>
</tr>
</tbody>
</table>
**Handling Precautions**

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

**Usable Life and Storage**

Freezing or long-term cold storage of ACUSOL™ 341 Polymer may cause some separation of the components. Although product performance is not impaired as long as the whole container is heated and well mixed, it is recommended to keep ACUSOL™ 341 Polymer out of freezing temperatures.

**Limitations**

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

**Health and Environmental Information**

To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, dow.com or consult your local Dow representative.

**Disposal Considerations**

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.

**Product Stewardship**

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

**Customer Notice**

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.