**Chemical nature**

Aqueous dispersion of an acrylate copolymer that crosslinks at room temperature

**Technical data**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid content</td>
<td>approx. 50%</td>
</tr>
<tr>
<td>pH value</td>
<td>approx. 7.0–9.0</td>
</tr>
<tr>
<td>Viskosity</td>
<td>approx. 15–40 mPa·s</td>
</tr>
<tr>
<td>Glass transition temperature</td>
<td>approx. –45 °C</td>
</tr>
<tr>
<td>Water absorption of film after 24 h</td>
<td>approx. 10%</td>
</tr>
<tr>
<td>Tensile strength of film</td>
<td>approx. 0.3 N/mm²</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>approx. 1700%</td>
</tr>
</tbody>
</table>

The exact specifications can be found in the specification data sheet.

**Application area**

Acronal A 213 S is used in the manufacture of pressure-sensitive adhesives for adhesive tapes and films. Its good adhesion to electrically pretreated polyolefin surfaces, its high cohesion and relatively low tackiness predestine it for the production of repositionable protective films. If plasticized PVC film is used as the carrier, the possible effects of plasticizer migration on the properties of the adhesive should be checked.

**Processing**

If Acronal A 213 S is to be mixed with another dispersion, the pH must be checked. The pH of each dispersion should lie in the 6.5–8 range, but not above 8, as this can bring about coagulation in mixtures containing Acronal A 213 S. The mechanical stability of the formulation can be improved by adding a small quantity of Collacral® VAL.

In the event of poor wetting, it is often helpful to add about 0.5% of a wetting agent (e.g. Lumiten® I-SC).

Commercially available antifoaming agents (e.g. Lumiten E-L) are suitable for suppressing foam. Usually the addition of 0.05–0.2% of the antifoaming agent in the formulation is sufficient.

We recommend adding a preservative to adhesives based on Acronal A 213 S to protect them from microbial attack. The suitability of such additives must be verified and monitored in trials. Adhesives based on Acronal A 213 S can be applied using commonly available application devices such as flat blade, Meyerbar, air brush, reverse roll, reverse gravure, curtain coater and nozzle.

Manufacturers must carefully carry out their own experimentation when developing pressure-sensitive adhesives based on Acronal A 213 S, as there is a host of factors in production and processing that we cannot cover exhaustively in our trials which can influence compatibility with other components of the adhesives, their wetting of and adhesion to different substrates etc.