Chemical nature

Aqueous dispersion of an acrylate copolymer containing carboxyl groups

Technical data

- **Solid content**: approx. 51%
- **pH value**: approx. 7.0 – 9.0
- **Viscosity**: approx. 18 – 20 mPa·s
- **Glass transition temperature of film**: approx. –45 °C

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

Application area

Acronal A 145 is used in the manufacture of self-adhesive labels, films and tapes. As it is hardly affected by plasticizers, it is particularly recommended for coating plasticized PVC film. However, since the effect of plasticizers on pressure-sensitive adhesives depends on the type and quantity of the plasticizers in the film, thorough trials, particularly storage trials, must be carried out before starting production of such articles.

Processing

If Acronal A 145 is to be mixed with another dispersion, the pH should be adjusted to the slightly alkaline range. Note that the viscosity increases when the pH is raised.

The mechanical stability of the formulation can be improved by adding a small quantity of thickener.

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 anti-foaming agent in the formulation is sufficient.

We recommend adding a preservative to adhesives based on Acronal A 145 to protect them from microbial attack. The suitability of such additives must be verified and monitored in trials. Adhesives based on Acronal A 145 can be applied using commonly available application devices such as flat blade, Meyer-bar, air brush, reverse roll, reverse gravure, curtain-coater and nozzle.

When developing adhesives based on Acronal A 145 careful in-house trials have to be carried out. The compatibility of Acronal A 145 with other ingredients of formulation and its ability to wet and adhere to different substrates etc. are affected by a variety of factors which are too numerous for us to take into account in our own trials.