**Chemical nature**

Aqueous dispersion of an acrylate copolymer with carboxylic groups that can be cross-linked by heating.

**Technical data**

- **Solids content**: approx. 49%
- **pH**: approx. 2.8 – 3.8
- **Viscosity**: approx. 20 – 100 mPas
- **Glass transition temperature**: approx. –7 °C
- **Water absorption of film after 24 h**: approx. 16%
- **Tensile strength of film**: approx. 2.7 N/mm²
- **Elongation at break**: approx. 1100%

For detailed information see Specification Data Sheet.

**Application area**

Acronal LA 449 S is used in the manufacture of pressure-sensitive adhesives for self-adhesive products. The adhesives adhere well to electrically treated polyolefin films and are used mainly for products with weak adhesion, e.g. protective films. As a rule, such products can be peeled off cleanly from many different types of surface without ghosting. To enable this, comprehensive trials to establish their suitability are essential.

**Processing**

Adhesives based on Acronal LA 449 S can be applied with the usual coating systems. It is recommended to raise the pH of Acronal LA 449 S to 6.0 – 7.5 with ammonia solution before mixing it with other dispersions, to improve stability and compatibility. In the event of poor wetting, it is often helpful to add about 0.5% of a wetting agent such as Lumiten® I-SC.

Commercially available antifoams such as Lumiten® E-L are suitable for suppressing foam. The exact amount of antifoam required must be determined in trials, though usually 0.05 – 0.2% in the formulation is sufficient. We recommend adding a preservative to adhesives that contain Acronal LA 449 S to protect them from microbial attack. The suitability of such additives must be verified and monitored in trials. Manufacturers must carry out their own comprehensive trials for developing pressure-sensitive adhesives based on Acronal LA 449 S as, in manufacture and use, a host of factors come into play such as the compatibility of their components, the nature of different plastic films and the type of substrate onto which they are to be applied that we cannot cover exhaustively in our trials. When formulating adhesives for repeelable films, particular attention is to be paid to the clean and easy detachment even after a long time of adhesion for all substrates that come in question.