



Uvacril P3

(Provisional)

Description

UVACRIL P3 is a UV-reactive solvent-free acrylate copolymer.

Application

UVACRIL P3 is used for pressure-sensitive adhesives that are applied in molten form and then crosslinked by exposure to UV light. Suggested applications: labels (filmic and paper permanent labels), tapes (double-sided, medical, insulating and speciality tapes).

The degree of crosslinking and thus the adhesive properties can be modified by varying the UV exposure: high exposures give greater shear strength, while low exposures gives higher tack and lower shear strength. Small deviations in the chosen radiation dosage have little effect on the adhesive properties.

Technical Specifications

| Method of analysis | MU | Standard |
|-------------------------|-------|-----------------|
| 1. Total Solids | % | > 99 |
| 106 Viscosity at 150 °C | mPa.s | 18,000 - 25,000 |

Handling

UVACRIL P3 can be processed in conventional hot melt adhesive coating machines at 110-140°C. After application, the product must be exposed to UV light (conventional medium-pressure mercury vapour lamps or microwave-excited UV lamps are suitable). The most effective wavelength range is between 220 and 280 nm. Since irradiation is usually carried out from one side only, a slight gradient in crosslinking density in the coating sets in (obviously depending on the coating weight);

therefore coatings produced under identical conditions, except direct and transfer process, can exhibit different adhesive properties. To avoid crosslinking gradient, a coating weight of maximum 80 g/m² should not be exceeded.

Storing

UVACRIL P3 can be stored up to 12 months, protected from light in tightly closed containers, at temperatures below 30°C.

Use within 12 months from production date (unopened and in the original packaging).

Notes

Glass transition temperature T_g (DSC) : -39°C