



UVACRIL P4

(Provisional)

Description

UVACRIL P4 is a resin-modified UV-reactive solvent-free acrylate copolymer.

Application

UVACRIL P4 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) with medium peel adhesion, high shear adhesion at elevated temperatures.

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.

Handling

UVACRIL P4 can be processed in conventional hot melt adhesive coating machines at 120-140°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 250 and 260 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.

Storing

UVACRIL P4 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

Viscosity at 130°C (shear rate 100 s⁻¹, cone and plate both heated at 130°C): 30.000-70.000 cps.

FDA-Status: The raw material meets the requirement of indirect food regulations according to ISEGA and FDA 21-CFR-175.105.

Skin Irritation: the raw material shows no skin irritation according to OECD test 404.