

ENCOR[®] 4500

ADHESIVES / PSA

ARKEMA COATING RESINS

Product

ENCOR[®] 4500 is a high solids acrylic latex, free from solvents, plasticizers and APE surfactants. This product dries into a film showing pressure sensitive properties.

Application details

ENCOR[®] 4500 has been designed to be used in the production of permanent PSA materials. This product can also be used to manufacture self-expandable foam tapes.

Performance Benefits

- High solids with low viscosity
- Very high peel adhesion and tack
- Good response to tackifiers
- Rheology properties suitable for curtain coating machines

Polymer Type

- Acrylic Copolymer

Sales Specifications

Solid Content at 105°C, % (ISO 3251)	67 - 69
pH (ISO 976)	4.5 - 5.5
Viscosity at 23°C, mPa.s (Brookfield RVT, 20rpm) (ISO 2555)	800 - 2200

Other Characteristics¹

Stabilizing system	A
Tg (DSC), °C	- 47
Density / Specific Gravity at 23°C, g/ml (ISO 2811)	1.02
Average Particle size, nm (ISO 13321)	400
Liquid Surface Tension (mN/m)	31

¹ The data provided for these properties are typical values, intended only as guides, and should not be construed as sales specifications

Typical Adhesive Properties¹

180° Peel after 24h on SS, N/25mm (FTM 1)	10 - 13
Loop tack on SS, N (FTM 9)	9 - 11
Shear adhesion from SS, h (FTM 8 / 1kg, 1in ²)	> 50

Test settings: Backing: PET 50 µm ; Coating weight: 20g/m² ; SS: Stainless Steel

Formulation Guidelines

According to the involved coating system and the final application, addition of specific defoamers can be required. Compatibility has then to be carefully checked in advance. In the case of poor wetting it is suggested to decrease the surface tension with the addition of suitable wetting agents such as dioctyl sulfosuccinates.

Product Safety

Please refer to the corresponding Safety Data Sheet.

Storage & Handling

ENCOR® 4500 should be stored indoors in the original, unopened and undamaged container, in a dry place at storage temperatures between 5°C and 30°C. Exposure to direct sunlight should be avoided.

The product is protected to prevent any microbial deterioration during normal conditions of storage but care should be taken to avoid accidental contamination during subsequent handling and processing.

In the above mentioned storage conditions the shelf life of the resin will be 6 months from the shipping date

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