

# PEARLSTICK® 45-40/27

Linear Thermoplastic Polyurethane

PEARLSTICK® 45-40/27 is an elastic, linear, aromatic polyurethane with a very high crystallisation rate and a medium thermoplasticity level.

## PRODUCT SPECIFICATIONS

### *Supply form*

**: White or slightly yellowish pellets without talcum or any other antiadherents in the formulation.**

*(The mentioned colour differences do not affect the quality of the adhesive)*

### *Viscosity @ 20°C*

*(Brookfield RVF sp.2, 20 rpm solution at 15% in MEK)*

**: 2500 - 2900 mPa.s**

*(MQSA N° 40 A)*

## PRODUCT CHARACTERISTICS

Density @ 20°C

: Approx. 1.19 g/cm<sup>3</sup>.

Hydroxyl number

: Approx. 0.1 %

Hydrolysis Resistance

: Good

Minimum Activation Temperature

: Approx. 45 °C.

## SOLUBILITY

PEARLSTICK® 45-40/27 is soluble in acetone, methyl ethyl ketone (MEK), cyclohexanone, dimethyl formamide, tetrahydrofurane (THF). Diluting solvents such as toluene and ethyl acetate can be added.

The solvents and diluents should be water-free (max. 0.1 %), so as to avoid subsequent side reactions during crosslinking with isocyanates.

## SOLUTIONS

PEARLSTICK® 45-40/27 should be dissolved in closed tanks, and the use of a variable speed agitator is advisable. The final viscosity figures can vary, depending on the stirring process and on the solvent/diluents ratios.

Please see our technical sheet on "Process for obtaining solutions based on PEARLSTICK®".

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## APPLICATIONS

**PEARLSTICK® 45-40/27** is used for the production of adhesives for bonding plasticized PVC to plasticized PVC or other materials such as leather, textiles, rubber, in the shoe industry.

**PEARLSTICK® 45-40/27** has a good temperature resistance, although the addition of a polyfunctional isocyanate improves the heat-resistance.

## HEALTH AND SAFETY

A safety data sheet on **PEARLSTICK® 45-40/27** is available, with all safety information. When solutions are prepared, the usual safety practices in the handling of chemicals should be observed, i.e.: good ventilation in the working area, good skin protection and protective goggles.

## PACKAGING

PE bags containing 25 kgs. n.w.  
Pallets of 750 kgs. n.w.

## STORAGE

**PEARLSTICK® 45-40/27** should be stored in a **cool (15-25°C) and dry place**, for periods that should not exceed 6 months, in well-closed packaging.