

Technical Data Sheet

PEARLSTICK™ 45-60/21 is an elastic, linear, aromatic polyurethane with an extremely high crystallisation rate and a low 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 : **2000–2300 mPa.s** (MQSA N° 40 A)
(Brookfield RVF sp.2, 20 rpm solution at 15% in MEK)

PRODUCT CHARACTERISTICS

Density @ 20°C : Approx. 1.19 g/cm³.
 Hydroxyl number : Approx. 0.1%
 Hydrolysis Resistance : Good
 Minimum Activation Temperature : Approx. 50°C.

SOLUBILITY

PEARLSTICK™ 45-60/21 is soluble in acetone, methyl ethyl ketone (MEK), cyclohexanone, dimethyl formamide, tetrahydrofuran (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™ 45-60/21 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™ 45-60/21 is used for the production of adhesives for bonding plasticized PVC to plasticized PVC or other materials such as leather, textiles, rubber, elastomeric PU etc. in the shoe industry.

The adhesives based on **PEARLSTICK™ 45-60/21** show:

- High green strength values.
- Easier heat activation (wide range of activation temperatures).
- Long and high hot-tack (tack retention).

PEARLSTICK™ 45-60/21 may be suitable as a raw material for the production of one-component adhesives.

HEALTH AND SAFETY

A safety data sheet on **PEARLSTICK™ 45-60/21** 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™ 45-60/21 must be stored in a cool (15–25°C) and environment prior to being processed. Standard practice of consuming resin on first-in first-out basis should be employed.

For further information refer to Lubrizol Advanced Materials processing guides.

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