Technical Data Sheet

PEARLSTICK™ 45-50/14 is an elastic, linear, aromatic polyurethane with an extremely high crystallization rate and a medium-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 @ 20ºC: 1200–1600 mPa.s (MQSA Nº 40 A)
(Brookfield RVF sp.2, 20 rpm solution at 15% in MEK)

PRODUCT CHARACTERISTICS

Density @ 20ºC: Approx. 1.19 g/cm³.
Hydroxyl number: Approx. 0.1%
Hydrolysis Resistance: Good
Minimum Activation Temperature: Approx. 55ºC.

SOLUBILITY

PEARLSTICK™ 45-50/14 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™ 45-50/14 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™“.

APPLICATIONS

PEARLSTICK™ 45-50/14 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™ 45-50/14 has a good heat resistance and improved freeze resistance and can be used as a one-component adhesive, although the addition of a polyfunctional isocyanate improves the heat-resistance.
HEALTH AND SAFETY
A safety data sheet on PEARLSTICK™ 45-50/14 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™ 45-50/14 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.