

## 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 @ 20°C** : **1200–1600 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/cm<sup>3</sup>.  
Hydroxyl number : Approx. 0.1%  
Hydrolysis Resistance : Good  
Minimum Activation Temperature: Approx. 55°C.

### 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.

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### 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.**

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