

SiwoPUD[®]-U-50

Characteristics: It is an aqueous anionic dispersion polyurethane of a high molecular weight. It is a raw material for formulation of heat-activated adhesives for use in, for example, the furniture, automotive, and construction industries. U-50X provides high solids content, and is particularly suitable for applications involving flexible PVC substrates.

Supplied as: 50% in water

Physical characteristics:	Appearance	Translucent-milky white
	Non-volatile constituent	50±1 %
	PH value	6.5 – 8.5
	Viscosity	≤300 mPa s
	Density(d ₄ ²⁰)	1.04
	NMP, NEP, DMAC etc.	Free
	Minimum film-forming temperature	5°C
	Minimum activation temperature	50-60°C
	Yellowing resistance	non- yellowing

Storage: The dispersion should be stored in a frost-free place in tightly sealed containers. It contains no preservative.

Application: U-50X has outstanding bonding properties on the most synthetic and natural materials. The thermal stability and resistance to plasticizers, grease and oil can be increased by the addition of 2-5% by weight of a water-dispersible polyisocyanate (For example, our product EC-600). The crosslinker is added just before application of the adhesive and mixed thoroughly. The pot life of the formulation should be borne in mind. In order to customize other and application-specific and technical properties, resin dispersions, emulsifiers and thickeners may also be added. Before application, especially by spraying, the product should be filtered to remove polymer particles which may have formed by initial drying. It does not contain NMP, NEP, DMAC etc.

Reference

The mechanical properties of the film were measured just after drying:

Elongation	1365%
Tensile strength	21.6Mpa
100%Modulus	0.8Mpa

The film after being placed at room temperature for 24 hours:

Elongation	1139%
Tensile strength	18.3Mpa
100%Modulus	2.2Mpa

The film after being placed at room temperature for 72 hours:

Elongation	933.5%
Tensile strength	18.3Mpa
100%Modulus	3.3Mpa

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