# Moisture-permeable Polyurethane Resin

#### Application-

Applicable to sports apparel, adhesive plaster, label seal, synthetic leather (furniture, clothing, shoes, etc.)

## Characteristics -

Our products are mainly applicable to moisture-permeable waterproof fabrics, because the formed coating films allow moisture vapor to permeate and never allow water drop to pass through.

#### X series (microporous type)

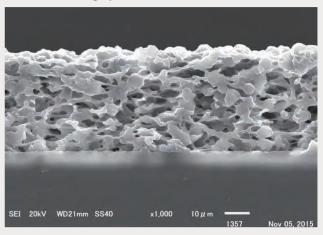
- $\bullet Solution\text{-polymerized polyurethane resin.} \\$
- •Capable of forming continuous porous layer with a thickness of several dozen  $\mu m$  after coating and then drying.

#### Y series (non-porous type)

- •Solution-polymerized non-porous polyurethane resin with a hydroxy group in its structure, and having moisture-permeability.
- Capable of forming moisture-permeable waterproof film after coating on release paper and evaporating the solvent.

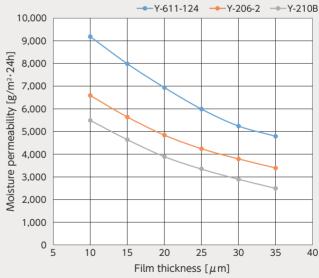
#### **Evaluation Results**-

#### ■ Electron micrograph



Cross-section of X type porous layer

# ■ Relationship between film thickness and moisture permeability



## ullet Above is our internal experimental data. It is not guaranteed.

# Representative Products

Application	Туре	Polyols	Product name
Moisture-permeable materials capable of forming porous layer(one-component type for film materials)	Semi-non-yellowing	Polyether	ATX-10
Skin layers consisting of moisture-permeable non-porous films (one-component type for film materials)	Semi-non-yellowing	Polyether	Y-206-2
			Y-210BNS
			Y-237NS
			Y-611-124
Adhesives for moisture-permeable non-porous films (two-component curing type for film materials)	Yellowing	Polyether/ Ester	Y-119ENS
			Y-173
		Polyether	Y-128NS