## Application

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

### Characteristics

Coating films formed by our X and Y series allow moisture vapor to permeate and allow no water drop to pass through, and are mainly applicable to moisture-permeable waterproof fabrics.

#### X series (microporous type)

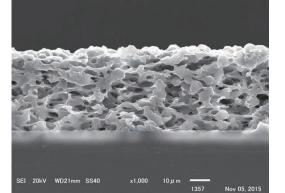
 Solution-polymerized polyurethane resin
Capable of forming continuous porous layer with a thickness of several dozen μm after coating and then drying

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

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

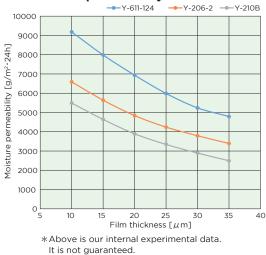
# Evaluation Results

Electron micrographs



Cross-section of X type porous layer

# Relationship between film thickness and moisture permeability



•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
			X-3040
Skin layers consisting of moisture-permeable non-porous films (one-component type for film materials)	Semi-non-yellowing	Polyether	Y-206-2
			Y-210B
			Y-237NS
			Y-611-124
Adhesives for moisture-permeable non-porous films (two-component curing type for film materials)	Yellowing	Polyether/ Ester	Y-119E
			Y-173
		Polyether	Y-128NS

Polyurethane resin