

PK exhibits excellent chemical resistance, therefore specialized adhesives are required to bond PK to PK or other materials.

Note: 1) PK: K990, 2) EP: Epoxy resin, 3) GL: Glass.

1、Overmolding Test

Product	Three bond (Japan)			Selley (Australia)
Model	TB1530	TB7784	TB3018	Plastic Glue + Primer Pen
Base Chemistry	Specialty Polymer	Cyanoacrylate	Acrylate	Ethyl Cyanoacrylate + Primer Pen
Curing Type	Moisture-Cure	Moisture-Cure	UV-Cure	Moisture-Cure
Curing Conditions	RT, 24h	RT, 24h	UV wavelength: 365 nm, Energy density: 3000 mJ/cm ²	Primer pen application + adhesive application (20~30sec), RT 30min
Tensile Shear Strength				
PK ¹⁾ + PK	5.3 MPa/300mm ²	2.2 MPa/300mm ²	Not UV-curable	8 MPa/100mm ²
PK + EP ²⁾	5.3 MPa/300mm ²	2.9 MPa/300mm ²	Not UV-curable	Not tested
PK + GL ³⁾	Glass Fracture	Glass Fracture	4 MPa/300mm ²	Not tested

2、Overmolding Test

Product	Three bond (Japan)	Toyo-morton (Japan)
Model	TB2001 + TB2105F	TM-585-60K(S) + CAT-10
Base Chemistry	Epoxy resin + Modified polyamide hardener	Polyester + Polyisocyanate
Curing Type	Two-component (Resin:Hardener = 1:1)	Two-component (Resin + Hardener)
Curing Conditions	RT, 72h	3~5μm → Bake: 80°C, 30sec → Pressure: 50°C nip roll → Cure: 40°C, 3 days
Tensile Shear Strength		
PK ¹⁾ + PK	PK elongation	4~5N Sample width: 15mm, T-peel, Peel speed: 300mm/min
PK + EP ²⁾	PK elongation	Not tested