Water-Based Polyester Adhesive Coating

Developed product

GX-1572・GX-1573

- Supports **mono-material** systems with PET substrates.
- **Strong adhesion** to metals, glass, and untreated PET films.
- GX-1573 contains biobased materials in the resin.
- Applications: adhesives, pressure-sensitive tapes, automotive interior components, and modifiers for inks and coatings.

General properties

	GX-1572	GX-1573
Biomass plastic degree	—	39%
Solid content	Light blue-white liquid	Blue-white liquid
Appearance	25%	25%
Solvent	ETB※: 10% Water: 65%	ETB※: 10% 水: 65%
pH (10% aq)	5.0～7.0	4.5～7.5
Viscosity (mPa·s/20℃)	About 300 mPa·s	About 100 mPa·s
Tg	1℃	−20℃
Acid Value (mgKOH/g)	<5	<5
Features	Strong adhesion・High holding power	Strong adhesion・High tack

※ ETB: Ethylene glycol mono tert-butyl ether (CAS No. 7580-85-0)

Adhesive properties

			GX-1572	GX-1572 +Crosslinker	GX-1573	GX-1573 +Crosslinker
Peel strength (N/25mm)	PET	After 20min at 20℃	24	24	29	20
		After 1day at 20℃	24	24	29	20
		After 3days at 40℃	26	25	35	33
	SUS	After 20min at 20℃	33	31	42	32
		After 1day at 20℃	33	31	42	39
		After 3days at 40℃	40	40	46	51
	Glass	After 20min at 20℃	6	3	30	23
		After 1day at 20℃	7	3	30	23
		After 3days at 40℃	43	44	51	53
	OPP	After 20min at 20℃	2	2	9	7
		After 1day at 20℃	2	3	11	13
		After 3days at 40℃	3	3	11	16
Holding power (20℃,1kg load)			5mm/24h	0.2mm/24h	2mm/1h	0.5mm/1h
Ball tack (Ball No.)			<2	<2	6	6
Water resistance (40℃,24h)			○	○	○	○

※ These values are for reference only and do not constitute product specifications.

Evaluation conditions

Formulations ▶ GX-1572: Thickener (ADEKA Adekanol UH-541VF): Crosslinker (Nisshinbo Chemical Carbodilite SV-02)=100: 1: X (X=0 or 3)
GX-1573: Thickener (ADEKA Adekanol UH-541VF): Crosslinker (Nisshinbo Chemical Carbodilite SV-02)=100: 3: X (X=0 or 3)
Substrate: 100μm untreated PET film Coating method: Applicator Drying conditions: 100℃×5min Adhesive layer thickness: 25μm

Peel strength ▶ Adherend: Untreated PET, SUS304, glass plate, corona treated OPP
Laminating conditions: 2kg×1cycle Curing conditions: 20℃×70%RH×20min
Measurement conditions: 20℃×70%RH Peel angle: 180° Peel speed: 300mm/min

Holding power ▶ Adherend: SUS Application area: 25mm×25mm Laminating conditions: 2kg×1cycle
Curing conditions: 20℃×70%RH×20min Measurement conditions: 20℃・1kg load

Ball tack ▶ J. Dow method (30°, 20℃×70%RH)

Water resistance ▶ Adherend: PET film Measurement conditions: immersion in ion-exchanged water at 40℃ for 24 hours, observing appearance change. ○: No change ×: Peeling/Whitening observed