

SUMIKAFLEX 951HQ

Type:	Ethylene-Vinyl Acetate-Vinyl ester of versatic acid terpolymer Emulsion		
Properties:	SUMIKAFLEX 951HQ (S-951HQ) is a grade which has good adhesion to plastic lamination paper and plastic film. Furthermore, its adhesiveness and creep to heat resistance are excellent.		
Main application:	Plastic lamination General adhesive Elastic paint Admixture for mortar		
Physical properties:			
Appearance		Milky white	
Solid content	(%)	55 ± 1	
Viscosity	(mPa·s)	100 – 1000	
pH		4 – 7	
Ave. particle size	(μm)	0.8	
Density	(g/cm³)	1.02	
MFT	(°C)	0	
Particle charge		Nonionic	
Mechanical stability		Good	
Tg	(°C)	–25	
Tensile strength	(MPa)	2.6	
Tensile elongation	(%)	1200	

< Technical information of SUMIKAFLEX 951HQ >

1. Emulsion properties

	S-951HQ
Appearance	Milky white
Solid content (%)	55 ± 1
Viscosity (mPa·s)	100 – 1000
pH	4 – 7
Ave. particle size (μm)	0.8
Density (g/cm ³)	1.02
MFT (°C)	0
Particle charge	Nonionic
Mechanical stability	Good
Tg (°C)	–25

2. Film properties

(1) Tensile strength

		Typical value
Original	Elongation (%)	1200
	Strength (MPa)	2.6

Test method

Thickness of film : 0.15 mm
 Shape of film : Dumbbell No.3
 Original state : 23°C × 65%RH

(2) Water resistance of film and alkali liquid

		S-951HQ	S-400HQ
Water resistance	Solve rate (%)	6	5
	Absorb rate (%)	25	16
Alkali liquid resistance	Solve rate (%)	10	9
	Absorb rate (%)	29	20

Test method

Thickness of film	: 0.15 mm
Water resistance	: Film immersed in water for 4 days at room temperature
Alkali resistance	: Film immersed in 1 N NaOH for 4 days at room temperature

3. Application

(1) Adhesive for paper and plastic film

	S-951HQ	S-400HQ
PET/wood free paper	Paper broken	2.2
PE lamination paper /craft paper	3.1	0.7

Test method

Coating	: Wire bar #22 (Wet 50 g/m ²)
Curing	: 23°C × 65%RH × 24 hours
Measurement	: 200 mm/min, 180° peel (N/25 mm)

(2) Creep of heat resistance

	S-951HQ	S-400HQ
Water Repellent corrugated paper	> 3 hours	> 3 hours

Test method

Material	: Water repellent corrugated paper surface and backside
Coating	: Wire bar #22 (Wet 50 g/m ²)
Curing	: 23°C × 65%RH × 24 hours
Measurement	: 85°C × 90%RH, shearing stress 100 gf