



FleXHC product portfolio

Highly transparent, Bright, Strong, Sustainable and Flexible

Display Application

Product	Substrate Thickness (µm)	Init. WCA	Optical Performance ²			Mechanical Performance				
			Transmittance % @ 550 nm	Reflectance % @ 550 nm	Haze Cmod	Pencil Hardness ³	Adhesion ⁴	Foldability ⁵	Steel wool Abrasion ⁶	Rubber Abrasion ⁷
FleXFOLD⁸	PET (50)	105	91.2% (Bare 90.1%)	4.5% (Bare 4.8%)	0.3	H-2H	5B	Pass	200c	NA
	CPI (50)	105	90.7% (Bare 89.2%)	4.8% (Bare 6.6%)	0.3	4H	5B	Pass	200c	NA
FleXFOLD+⁹	PET (50)	115	90.8% (Bare 90.1%)	4.4% (Bare 4.8%)	0.5	2H	5B	Pass*	3000c	3000c
	CPI (50)	115	90.4% (Bare 89.3%)	4.6% (Bare 6.6%)	0.3	4H	5B	Pass	2000c	6000c
FleXFOLD One¹⁰	PET (50)	>110	90.0 (Bare 90,7)	4.4% (Bare 4,9%)	0.4	H-2H	5B	Pass	2000c	1000c
	CPI (50)	>110	89.1 (Bare 89,1%)	4.6% (Bare 6,6%)	0.3	4H	5B	Pass	2000c	NA
FleXFOLD LR+⁹	PET (50)	114	91.7% (Bare 90,5%)	3,8% (Bare 4,5%)	0.4	H-2H	5B	NA	2000c	1200c

Transparent Plastic Application

FleXHC-16⁸	PET (125)	102	90,1 (Bare 88,5%)	5.1% (Bare 6,8%)	0.5	H-2H	5B	NA	200c	NA
FleXHC-32⁸	PMMA (375)	102	>93% (Bare 92%)	NA	0.4	5H	4-5B	NA	200c	NA
	PC (125)	102	91.8% (Bare 90.7%)	NA	0.1	F	5B	NA	200c	NA

¹Biolin Scientific-Attension Theta Static Water Contact Measurement

²Konica Minolta spectrophotometer CM-3700A (Spectra Magic NX software)

³ASTM D3363, Elcometer Tester

⁴ASTM D3359-09, Elcometer cross-hatch tester

⁵Foldability (infolding R=1.5mm, outfolding R=2.5mm 200 000 cycles), *FleXFOLD+ ((infolding R=1 mm, outfolding R=2.5mm 500 000 cycles)

⁶Taber® Linear Abraser Model 5750, 2 cm x 2 cm head, 1 kg load (60 cycles/minute), Bonstar #0000 steel wool (number of cycles with water contact angle (WCA) > 100°)

⁷Minoan rubber abrasion test, TABER® Linear Abraser-Model 5750, Minoan rubber 1 kg weight lead, 40 cycles / min (number of cycles with water contact angle (WCA) > 100°)

⁸1 layer without AF function

⁹2 layers including AF function on top ([TPD150R](#))

¹⁰1 layer with AF function (Foldability passed with 5 µm coated film, all other properties were done with 7 µm coated film)