

HARDEN Film is the sequentially biaxially stretched film whose main material is nylon 6 (polyamide). Toyobo HARDEN Film Sophie-N1152 is the grade whose slipperiness under highly humid situation is improved.

## FUTURE

- (1) Good slipperiness under high humidity
- (2) Superior in packaging machinery aptitude in high speed
- (3) Possible to prevent feathering from occurring by peeling charge and frictional charge while printing

## USE

- Use for filling under high humidity
- Use for filling in high speed

## General physical property of HARDEN Film Sophie N1152 type

Item		Unit	N1152 HARDEN Sophie	N1100	Measuring method
Thickness		μm	15	15	
Haze		%	4.5	1.5	JIS K7105
Tensile breaking strength	Length	Mpa	216	206	JIS K7127
	Width		275	275	
Tensile breaking elongation	Length	%	105	100	JIS K7127
	Width		70	70	
Heat shrinkage rate (160 degrees C, 10 mins)	Length	%	0.9	1.0	JIS K6782
	Width		0.9	1.1	

### (Slipperiness)

Static friction coefficient	B/B	23°C×50% RH	0.3	0.55	JIS K7125
Dynamic friction coefficient	B/B	23°C×50% RH	0.25	0.45	
		23°C×65% RH	0.3	0.82	
		23°C×80% RH	0.35	2.2	

On these data, the representative values were measured under the specialized condition (23 degrees C, 50%RH) at our company's film feature evaluation agency.  
Surface B: Non-corona processed surface.

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