

Company	Photodon, LLC	Michigan	USA	Phone 847-377-1185	Email Sales@photodon.com	
Product Name	HSC	Product Type	9H, Oleophobic, Anti-microbial, Shock absorbing		Date January 2022	
Test Condition						
Temperature C° 22 ± 2			Humidity 28%			
Test Items		Unit	Spec	Result	Test Method	
Material	Top Liner	µm		60	Micrometer	
	AM Resin / Hard Coating	µm			Micrometer	
	Substrate PET film	µm		200	Micrometer	
	Silicone Resgin	um		100	Micrometer	
	Release Liner	µm		50	Micrometer	
	Thickness without liners	µm	± 10		300	Micrometer
Optical Properties	Total Luminous Transmittance	%		92.3	ASTM D1003	
	Gardner Haze	%		0.9	ASTM D1003	
	Gloss Level @ 60°	gloss units		170.5	Spectrometer	
	Rainbow Moire	n/a		Pass	Eye Test	
Thermal Properties	Curling	%		91.3	>90	
	Thermal Shrinkage	%		0.13/0.15	MD/TD <10	
	Retentivity	mm/hr		<3.0	[KSA1107] 500g/100°C	
	Temp/Humidity	°C/RH%		No Problem	85°C / 85RH%	
Mechanical Properties	Contact Angle	°	±5	110	Contact Angle Meter	
	Oleophobic Coating Durability	~ 3 Months				
	Adhesion Stability	100/100			FINAT-1 180°	
	Pencil Hardness	Film only	H	≥ 9		ASTM D3363-74
		w/adhesive	H	≥ 7		ASTM D3363-74
	Steel Wool Abrasion					
	Oleophobic Coating Testing	°	±2	95	1500cycles / Rubbing test stick@ 45°, 500g load/cm ² *Rubber stick Hardness: 81(DurometerA type)	
	Peeling Strength	gf/inch	10/30 min		180 degree peel g/25mm, 300mm/min UTM Instrument method Lloyd LS1	
Chemical Resistance	Resistant to:					
	Alcohols	Hydrocarbons				DIN 42 115
	Dilute acids	Ketones				
	Dilute alkalis	Household Cleaning Agents				
	Esters					

The technical data sheets are not guaranteed values, but rather measurement values given as an example. Photodon does not guarantee that the film can be used for any example applications provided.