

Dow ELITE™ 5401G

ELITE™ 5401G is a copolymer produced via INSITE™ Technology from Dow Plastics. It offers a unique combination of low seal initiation, moderate stiffness and low blocking for excellent performance on automated packaging equipment. ELITE™ 5401G resin complies with U.S. FDA regulation 21 CFR 177.1520 (c) 3.2a.

Physical Properties	Metric	English	Comments
Density	0.9175 g/cc	0.03315 lb/in ³	ASTM D792
Thickness	50.8 microns	2.00 mil	
Melt Flow	1.0 g/10 min	1.0 g/10 min	ASTM D1238
Antiblock Level	2500 ppm	2500 ppm	
Slip Level	1000 ppm	1000 ppm	

Mechanical Properties	Metric	English	Comments
Film Tensile Strength at Yield, MD	8.267 MPa	1199 psi	ASTM D882
Film Tensile Strength at Yield, TD	8.811 MPa	1278 psi	ASTM D882
Film Elongation at Break, MD	572 %	572 %	ASTM D882
Film Elongation at Break, TD	612 %	612 %	ASTM D882
Secant Modulus, MD	0.1809 GPa	26.23 ksi	2% Secant; ASTM D882
Secant Modulus, TD	0.2044 GPa	29.65 ksi	2% Secant; ASTM D882
Impact	18	18	[lb _f]; Puncture Resistance Force; Dow Method
	168	168	[ft-lbf/in ³]; Puncture Resistance; Dow Method
Puncture Energy	5.76 J	4.25 ft-lb	Dow Method
Elmendorf Tear Strength MD	780 g	780 g	ASTM D1922
Elmendorf Tear Strength TD	975 g	975 g	ASTM D1922
Elmendorf Tear Strength, MD	15.4 g/micron	390 g/mil	ASTM D1922
Elmendorf Tear Strength, TD	19.19 g/micron	487.5 g/mil	ASTM D1922

Dart Drop Test	>= 850 g	>= 1.87 lb	Method B; ASTM D1709
Film Tensile Strength at Break, MD	38.04 MPa	5517 psi	ASTM D882
Film Tensile Strength at Break, TD	36.54 MPa	5299 psi	ASTM D882

Heat Seal Strength Initiation Temperature

95.0 °C

203 °F

2 lb/in heat seal strength;
0.5 sec dwell, 40 psi bar
pressure, pull speed 10
(in./min.); Dow Method

Thermal Properties	Metric	English	Comments
Melting Point	123 °C	253 °F	Dow Method (DSC)

Vicat Softening Point

100 °C

212 °F

ASTM D1525

Optical Properties	Metric	English	Comments
Haze	13 %	13 %	ASTM D1003

Gloss

64 %

64 %

45°; ASTM D2457

Compliance Properties	Metric	English	Comments
FDA	Yes	Yes	See notes for details.

