

AGILITY™ 1200 Performance LDPE

The Dow Chemical Company - Low Density Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

AGILITY™ 1200 Performance LDPE is a high pressure LDPE resin designed specifically to run at faster output rates on blown film lines in blends with LLDPE resins while maintaining bubble stability. It also has excellent shrink and good optics performance in blends with LLDPE resins.

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General				
Material Status	Commercial: Active			
Availability	Asia PacificEurope	Latin AmericaNorth America		
Additive	Antiblock: No	Processing Aid: No	Slip: No	
Forms	Pellets			

Density 0.919 g/cm³ ASTM D1505 Melt Mass-Flow Rate (190°C/2.16 kg) 0.22 g/10 min ASTM D1238 Films Nominal Value Unit Test Method Film Thickness - Tested 2 mil Secant Modulus - 2% Secant, MD (2.0 mil) 29000 psi ASTM D882 Secant Modulus - 2% Secant, TD (2.0 mil) 33000 psi ASTM D882 Tensile Strength - MD (Yield) 1600 psi ASTM D882 Tensile Strength - TD (Yield) 1600 psi ASTM D882 Tensile Elongation - MD (Break) 200 % ASTM D882 Tensile Elongation - TD (Break) 500 % ASTM D882 Dart Drop Impact 170 g ASTM D1709A Elmendorf Tear Strength - MD 220 g ASTM D1922 Elmendorf Tear Strength - TD Nominal Value Unit Test Method Melting Temperature (DSC) 228 °F Internal Method	ASTM & ISO Properties 1					
Melt Mass-Flow Rate (190°C/2.16 kg) 0.22 g/10 min ASTM D1238 Films Nominal Value Unit Test Method Film Thickness - Tested 2 mil ————————————————————————————————————	Physical	Nominal Value	Unit	Test Method		
Film S Nominal Value Unit Test Method Film Thickness - Tested 2 mil Secant Modulus - 2% Secant, MD (2.0 mil) 29000 psi ASTM D882 Secant Modulus - 2% Secant, TD (2.0 mil) 33000 psi ASTM D882 Tensile Strength - MD (Yield) 1600 psi ASTM D882 Tensile Strength - TD (Yield) 1600 psi ASTM D882 Tensile Elongation - MD (Break) 200 % ASTM D882 Tensile Elongation - TD (Break) 500 % ASTM D882 Dart Drop Impact 170 g ASTM D1709A Elmendorf Tear Strength - MD 220 g ASTM D1922 Elmendorf Tear Strength - TD 210 g ASTM D1922 Termal Nominal Value Unit Test Method Optical Nominal Value Unit Test Method Gloss (45°) 34 ASTM D2457	Density	0.919	g/cm³	ASTM D1505		
Film Thickness - Tested 2 mil Secant Modulus - 2% Secant, MD (2.0 mil) 29000 psi ASTM D882 Secant Modulus - 2% Secant, TD (2.0 mil) 33000 psi ASTM D882 Tensile Strength - MD (Yield) 1600 psi ASTM D882 Tensile Strength - TD (Yield) 1600 psi ASTM D882 Tensile Elongation - MD (Break) 200 % ASTM D882 Tensile Elongation - TD (Break) 500 % ASTM D882 Dart Drop Impact 170 g ASTM D1709A Elmendorf Tear Strength - MD 220 g ASTM D1922 Elmendorf Tear Strength - TD Nominal Value Unit Test Method Melting Temperature (DSC) Nominal Value Unit Test Method Optical Nominal Value Unit Test Method Gloss (45°) 34 ASTM D2457	Melt Mass-Flow Rate (190°C/2.16 kg)	0.22	g/10 min	ASTM D1238		
Secant Modulus - 2% Secant, MD (2.0 mil) 29000 psi ASTM D882 Secant Modulus - 2% Secant, TD (2.0 mil) 33000 psi ASTM D882 Tensile Strength - MD (Yield) 1600 psi ASTM D882 Tensile Strength - TD (Yield) 1600 psi ASTM D882 Tensile Elongation - MD (Break) 200 % ASTM D882 Tensile Elongation - TD (Break) 500 % ASTM D882 Dart Drop Impact 170 g ASTM D1709A Elmendorf Tear Strength - MD 220 g ASTM D1922 Elmendorf Tear Strength - TD 210 g ASTM D1922 Thermal Nominal Value Unit Test Method Optical Nominal Value Unit Test Method Gloss (45°) 34 ASTM D2457	Films	Nominal Value	Unit	Test Method		
Secant Modulus - 2% Secant, TD (2.0 mill) 33000 psi ASTM D882 Tensile Strength - MD (Yield) 1600 psi ASTM D882 Tensile Strength - TD (Yield) 1600 psi ASTM D882 Tensile Elongation - MD (Break) 200 % ASTM D882 Tensile Elongation - TD (Break) 500 % ASTM D882 Dart Drop Impact 170 g ASTM D1709A Elmendorf Tear Strength - MD 220 g ASTM D1922 Elmendorf Tear Strength - TD 210 g ASTM D1922 Thermal Nominal Value Unit Test Method ADptical Nominal Value Unit Test Method Gloss (45°) 34 ASTM D2457	Film Thickness - Tested	2	mil			
Tensile Strength - MD (Yield) 1600 psi ASTM D882 Tensile Strength - TD (Yield) 1600 psi ASTM D882 Tensile Elongation - MD (Break) 200 % ASTM D882 Tensile Elongation - TD (Break) 500 % ASTM D882 Dart Drop Impact 170 g ASTM D1709A Elmendorf Tear Strength - MD 220 g ASTM D1922 Elmendorf Tear Strength - TD 210 g ASTM D1922 Thermal Nominal Value Unit Test Method Melting Temperature (DSC) 228 °F Internal Method Optical Nominal Value Unit Test Method Gloss (45°) 34 ASTM D2457	Secant Modulus - 2% Secant, MD (2.0 mil)	29000	psi	ASTM D882		
Tensile Strength - TD (Yield) 1600 psi ASTM D882 Tensile Elongation - MD (Break) 200 % ASTM D882 Tensile Elongation - TD (Break) 500 % ASTM D882 Dart Drop Impact 170 g ASTM D1709A Elmendorf Tear Strength - MD 220 g ASTM D1922 Elmendorf Tear Strength - TD 210 g ASTM D1922 Thermal Nominal Value Unit Test Method Optical Nominal Value Unit Test Method Gloss (45°) 34 ASTM D2457	Secant Modulus - 2% Secant, TD (2.0 mil)	33000	psi	ASTM D882		
Tensile Elongation - MD (Break) 200 % ASTM D882 Tensile Elongation - TD (Break) 500 % ASTM D882 Dart Drop Impact 170 g ASTM D1709A Elmendorf Tear Strength - MD 220 g ASTM D1922 Elmendorf Tear Strength - TD 210 g ASTM D1922 Thermal Nominal Value Unit Test Method Melting Temperature (DSC) 228 °F Internal Method Optical Nominal Value Unit Test Method Gloss (45°) 34 ASTM D2457	Tensile Strength - MD (Yield)	1600	psi	ASTM D882		
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Dart Drop Impact 170 g ASTM D1709A Elmendorf Tear Strength - MD 220 g ASTM D1922 Elmendorf Tear Strength - TD 210 g ASTM D1922 Thermal Nominal Value Unit Test Method Melting Temperature (DSC) 228 °F Internal Method Optical Nominal Value Unit Test Method Gloss (45°) 34 ASTM D2457	Tensile Elongation - MD (Break)	200	%	ASTM D882		
Elmendorf Tear Strength - MD 220 g ASTM D1922 Elmendorf Tear Strength - TD 210 g ASTM D1922 Thermal Nominal Value Unit Test Method Melting Temperature (DSC) 228 °F Internal Method Optical Nominal Value Unit Test Method Gloss (45°) 34 ASTM D2457	Tensile Elongation - TD (Break)	500	%	ASTM D882		
Elmendorf Tear Strength - TD 210 g ASTM D1922 Thermal Nominal Value Unit Test Method Melting Temperature (DSC) 228 °F Internal Method Optical Nominal Value Unit Test Method Gloss (45°) 34 ASTM D2457	Dart Drop Impact	170	g	ASTM D1709A		
ThermalNominal ValueUnitTest MethodMelting Temperature (DSC)228°FInternal MethodOpticalNominal ValueUnitTest MethodGloss (45°)34ASTM D2457	Elmendorf Tear Strength - MD	220	g	ASTM D1922		
Melting Temperature (DSC) 228 °F Internal Method Dptical Nominal Value Gloss (45°) 34 ASTM D2457	Elmendorf Tear Strength - TD	210	g	ASTM D1922		
OpticalNominal ValueUnitTest MethodGloss (45°)34ASTM D2457	Thermal	Nominal Value	Unit	Test Method		
Gloss (45°) 34 ASTM D2457	Melting Temperature (DSC)	228	°F	Internal Method		
	Optical	Nominal Value	Unit	Test Method		
Haze 18.0 % ASTM D1003	Gloss (45°)	34		ASTM D2457		
	Haze	18.0	%	ASTM D1003		

Processing Information

our control, and we cannot and will not take responsibility for the information or content.

Extrusion Notes

Fabrication Conditions For 2 mil monolayer Blown Film at 100%:

· Die Diameter: 8 in. · Screw Type: DSB II • Die Gap: 30 mil

• Melt Temperature: 460 °F

· Output: 12 lb/hr/in. of die circumference

· Screw Size: 3.5 in. • Blow-Up Ratio: 2.5 to 1 · Screw Speed: 47 rpm





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¹ Typical properties: these are not to be construed as specifications.

