



Blue Ultra Specification for polyethylene plastic molding and extrusion material – PE4710

Typical Raw Material Properties

	Values		ASTM
	English Units	SI Units	Method
Density (Natural)		0.949 g/cc	D4883
Density (Blue)		0.959 g/cc	
Melt Index 190 C/ 21.6 kg		8g/10 min	D1238
Tensile Strength			
@ Yield (2 in/min)	3625 psi	25.0 MPa	D638
@ Break (2 in/min)	5500 psi	38.0 MPa	D638
Elongation			
@ Break (2 in/min)	>600%	>600%	D638
Flexural Modulus ²	135,000 psi	930 MPa	D790A
Notched Izod Impact Strength	12 ft-lbf/in	12 kJ/m ²	D256
Hardness (Shore D)	64	64	D2240
Brittleness Temperature	<-180° F	<-118° C	D746
Vicat Softening Point	259° F	126° C	D1525
Thermal Stability	464° F min	240° C min	D3350
Hydrostatic Design Basis			
@23° C	1600 psi	11.0 MPa	D2837
@60° C	1000 psi	6.9 MPa	D2837
Minimum Required Strength	1,450 psi	10.0MPa	ISO 9080/12162
Environmental Stress Crack Resistance ³	>5,000 hrs	>5,000 hrs	D1693
Notch Tensile (PENT)	>10,000 hrs	>10,000 hrs	F1473
Cell Classification	445574E	445576E	D3350

² 2% Secant-Method 1

³ Condition B