

A4040 Polyethylene Copolymer

A4040 is a high density polyethylene copolymer specifically designed as the base resin for the production of cross-linked pipes according to the PEX B silane process.

Typical Properties¹

	Values		ASTM Method
	English Units	SI Units	
Resin			
Density	—	0.947 g/cc	D4883
Melt Index 190 C/2.16 kg	—	4.1 g/10 min	D1238
Compression Molded Samples			
Tensile Strength (2 in/min)			D638
@ Yield	3,550 psi	24.5 MPa	
@ Break	4,360 psi	30.0 MPa	
Elongation (2 in/min)			D638
@ Yield	11 %	11 %	
@ Break	1,270 %	1,270 %	
Flexural Modulus			D790A
2% Secant Method	125,000 psi	860 MPa	
Notched Izod Impact Strength	1.1 ft-lbf/in	5.9 kJ/m ²	D256
Hardness			D2240
Shore D	61	61	
Vicat Softening Point	254 F	124 C	D1525
Brittleness Temperature	<-103 F	<-75 C	D746
Heat Deflection Temperature			D648
@ 66 psi (455 kPa)	157 F	70 C	
Environmental Stress Crack Resistance			D1693
Condition B, 100% Igepal, F50 (hrs.)	10	10	
Oxidation Induction Time			D3895
@ 210 C	>2.5 min	>2.5 min	

¹ Properties will vary and are not to be used for specification purposes.