

CP53-30 Polyethylene Copolymer

CP53-30 is a high density polyethylene copolymer developed for corrugated piping applications. This product is recommended for use in applications that are required to meet AASHTO specifications: M 294/MP 7. CP53-30 is a listed PPI Third Party Certified resin.

Typical Properties¹

	Values		ASTM Method
	English Units	SI Units	
Resin			
Density	—	0.953 g/cc	D4883
Melt Index 190 C/2.16 kg	—	0.35 g/10 min	D1238
Melt Index 190 C/21.6 kg	—	25 g/10 min	D1238
Compression Molded Samples			
Tensile Strength (2 in/min)			D638
@ Yield	3,700 psi	25.5 MPa	
@ Break	4,900 psi	33.8 MPa	
Elongation (2 in/min)			D638
@ Yield	9.0 %	9.0 %	
@ Break	>600 %	>600 %	
Flexural Modulus			D790A
2% Secant Method	142,000 psi	979 MPa	
Notched Izod Impact Strength	8.6 ft-lbf/in	45.3 kJ/m ²	D256
Hardness			D2240
Shore D	65	65	
Vicat Softening Point	257 F	125 C	D1525
Brittleness Temperature	<-180 F	<-118 C	D746
Heat Deflection Temperature			D648
@ 66 psi (455 kPa)	74.2 F	23.4 C	
Environmental Stress Crack Resistance			D1693
Condition B, 100% Igepal, F50	>1,000 hrs.	>1,000 hrs.	
Oxidation Induction Time			D3895
@ 210 C	>58 min	>58 min	
NCTL ESCR (Single Point)	>1,000 hrs.	>1,000 hrs.	D5397
Cell Classification	435560A	435560A	D3350

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