

# 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 Properties<sup>1</sup>

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

<sup>1</sup> Properties will vary and are not to be used for specification purposes.