



PPQ Resin (High Density Polyethylene)

Typical properties are detailed below.

Property	ASTM Test Method	Units	Nominal Value
Melt Index	D1238	g/10min	0.35
Density	D1505	g/cc	0.958
Tensile Strength			
Break	D638	psi	>2,900
Elongation	D638	%	>690
Tensional Stiffness	D790	psi	195,800
Hardness	D2240	Shore D	70
Melting Point	D1525	°C	135
Low Temperature Brittleness	D746	°C	<-80
ESCR, 100% Igenal CO-630	D1631	h(F50)	80
Processing Techniques	Extrusion Blow Molding		✓
Characteristics	Low Particle		✓
	Non Additive		✓

PPQ Resin is proprietary high-density polyethylene (HDPE) with a higher than normal molecular weight and very narrow distribution. This resin has physical process properties similar to "standard" HDPE (melt index, melt temperature, density, etc.) except that PPQ provides greater chemical compatibility, 3X Environmental Stress Crack Resistance (ESCR) value and orders of magnitude lower metal extractables. PPQ is a PurePak attributed moniker representing "parts-per-quadrillion" impurity extractibles.

DOT-SP 14656 authorizes the use of PurePak's bottles made with PPQ Resin for packaging nitric acid, 70% and less, without the requirement of a metal overpack. PPQ Bottles and their liquid contents do not discolor with packaged nitric acid and nitric containing mixtures.