



# **BRAND OVERVIEW**





Entec Polymers generic prime materials offer a diverse product portfolio along with the quality customer's expect in today's market. Our line card of HYPEL polyethylene products is shown below. HYPEL® PE resin products are available in high density, low density and linear low density grades with a range of density and melt indexes for optimal process performance.

Grade	РЕ Туре	Melt Mass Flow Rate (g/10 min) 190°C/2.16 kg, ASTM D1238	Density (g/cm³) ASTM D792	Flexural Modulus (MPa) 23°C, ASTM D790	Tensile Strength (MPa) at Yield, 23°C, ASTM D638	RoHS Compliance	FDA
PEHD.3/.955	HDPE	0.35	0.953	1380	27.6	Yes	No
PEHD.7/.962	HDPE	0.7	0.962	1550	31.7	Yes	Yes
PEHD4/.955	HDPE	4.8	0.955	862	22.1	Yes	Yes
PEHD8/.953	HDPE	6.6	0.951	1250	28.3	Yes	Yes
PEHD10/.964	HDPE	10	0.964	1300	27	Yes	No
PEHD18/.956	HDPE	18	0.954	1150	29	Yes	Yes
PEHD20/.953	HDPE	20	0.953	903	27.1	Yes	No
PEHD30/.950	HDPE	30	0.95	965	23.1	Yes	No
PELLD5/.935	LLDPE	5	0.933	689	18.6	Yes	Yes
PELD2/.920	LDPE	2.2	0.918		13.6	Yes	No
PELD8/.920	LDPE	8	0.918	185	10.3	Yes	No
PELD20/.920	LDPE	20	0.918	228	11	Yes	Yes
PELD50/.924	LDPE	50	0.922	345	11.7	Yes	Yes



### **ADVANTAGES OF LDPE**



Easy Processing



Flexible

Good Clarity



Low Density

#### **ADVANTAGES OF LLDPE**



Stretchability



Good Hot Tack Strength



Puncture & Tear Resistance



UV & Stress Cracking Resistance

#### **ADVANTAGES OF HDPE**



Good Tear & Impact Resistance



Excellent Surface Finish



Rigidity



Good Stress Cracking Resistance

## **PROCESSING CONDITIONS**

Material Density (g/cm3)	0.91 - 0.93	0.94 - 0.96	High Flow (Any Density)
Rear Zone Temperature, °F	325	350	390 - 450
Center Zone Temperature, °F	350	400	430 - 500
Front Zone Temperature, °F	370	420	445 - 540
Nozzle Temperature, °F	380	425	445 - 500
Screw Speed	Medium	Medium	Medium - Fast
Back Pressure (psi)	0 - 50	0 - 50	0 - 50
Mold Temperature, °F	40 - 68	40 - 68	40 - 68
Hot Runner Temperature, °F	400 - 500	400 - 500	400 - 500
Injection Pressure (psi)	5,000 - 19,000	5,000 - 19,000	5,000 - 19,000