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## **POLYETHYLENE**

# F0554

### Bimodal High Density Polyethylene for film application

#### Description

F0554 is a high molecular weight high density polyethylene resin designed for blown film applications. This resin has broad molecular weight distribution that makes it easier to process. Films made from this resin exhibit high stiffness, excellent impact and toughness characteristics.

### **Applications**

- Shopping bag
- Garbage bag
- Industrial liner

Resin Properties		Unit	Test Method	Typical Value	
MFR (190°C/2.16Kg)		g/10min	ASTM D1238	0.05	
MFR (190°C/21.6Kg)		g/10min	ASTM D1238	9.3	
Density		g/cm <sup>3</sup>	ASTM D792 Method A	0.951	
Film Properties*				Without Stabilizer	With Stabilizer
Tensile Strength at Yield	MD	MPa	ASTM D882	35	35
	TD			30	30
Tensile Strength at Break	MD	MPa	ASTM D882	70	75
	TD			65	55
Tensile Elongation at Break	MD	%	ASTM D882	560	520
	TD			550	560
1% Secant Modulus	MD	MPa	ASTM D882	930	990
	TD			1030	1140
Elmendorf Tear Strength	MD	gf	ASTM D1922	17	11
	TD			39	78
Dart Drop Impact		g	ASTM D1709	340	280
Thermal Properties*					
Vicat Softening Temperature @10N		°C	ASTM D1525	126	

<sup>\*</sup>Blown film processing conditions: Extruder Φ50 mm, Die Φ120 mm, Die lip gap 1.35 mm, Temperature 200 °C, Output rate 50 kg/h, BUR 4.0, Film thickness 20 μm, Neck height 840 mm.

Processing conditions: Typical processing conditions: 180-230 °C.

**Storage and handling:** F0554 should be stored in a dry cool place with adequate ventilation and protected from UV-light at temperatures below 50°C. It is advisable to process polyethylene resins within 6 months after delivery.

Food Contact Compliance and other Regulations: Please visit Petro Rabigh website.

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