# بترو رابغ Petro Rabigh

## **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
Tancila Strangth at Viold	MD	MPa	ASTM D882	35	35
Tensile Strength at Yield	TD			30	30
Tancila Strangth at Brook	MD	MPa	ASTM D882	70	75
Tensile Strength at Break	TD			65	55
Tensile Elongation at Break	MD	%	ASTM D882	560	520
	TD			550	560
1% Secant Modulus	MD	MPa	ASTM D882	930	990
1 % Secant Modulus	TD	IVIFa	ASTIVI DOOZ	930 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 @ 1011	O	AOTIVI D 1020	120	
*Blown film processing conditions: Extruder Φ50 mm, Die	e Ф120 mm, Die lip gap	1.35 mm, Temperature 200 °C, Output	t rate 50 kg/h, BUR 4.0, Film thickness 20 µ	ım, Neck
height 840 mm.				

ΔSTM D1525

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

Vicat Softening Temperature @10N

**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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