

# POLYPROPYLENE

## FS2011E

### Polypropylene Homopolymer for Biaxially Oriented Film

#### Description

FS2011E is a polypropylene homopolymer intended for the extrusion of biaxially oriented film. It is easy to process and suitable for metallization. The film made from this resin exhibits excellent transparency, excellent mechanical and barrier properties.

#### Applications

- Food packaging
- Printing lamination
- Adhesive tape
- Stationary Packaging
- Metalized film

Resin Properties	Unit	Test Method	Typical Value	
MFR (230°C/2.16Kg)	g/10min	ASTM D1238	2.2	
Density	g/cm <sup>3</sup>	ASTM D792 Method A	0.9	
<b>Mechanical Properties*</b>				
Tensile Strength at Yield	MPa	ASTM D638	32	
Tensile Elongation at Yield	%	ASTM D638	9.0	
Tensile Strength at Break	MPa	ASTM D638	19	
Tensile Elongation at Break	%	ASTM D638	155	
Flexural Modulus	MPa	ASTM D790	1280	
Flexural Strength	MPa	ASTM D790	34	
Izod Impact, Notched 23deg.C	kJ/m <sup>2</sup>	ASTM D256	2.9	
Rockwell Hardness		ASTM D785	98	
<b>Film Properties**</b>				
Tensile Strength at Break	MD	MPa	ASTM D882	110
	TD			215
Tensile Elongation at Break	MD	%	ASTM D882	85
	TD			17
1% Secant Modulus	MD	MPa	ASTM D882	2050
	TD			3700
Haze	%	ASTM D1003	0.2	
Gloss 45-degree	--	ASTM D2457	155	
<b>Thermal Properties*</b>				
Vicat Softening Temperature @10N	°C	ASTM D1525	153	

\*Test specimen preparation method: Compliant with ASTM D 4101.

\*\*Film processing conditions: Single layer film produced by sequential bi-axially oriented film machine, MDO stretching ratio is 5, TDO stretching ratio is 8, Film thickness 20 µm.

Disclaimer: © Petro Rabigh. All information supplied by or on behalf of Petro Rabigh in relation to its products, whether in the nature of data, recommendations or otherwise, is supported by research and believed reliable, but Petro Rabigh assumes no liability whatsoever in respect of application, processing or use made of the provided information or products, or any consequence thereof. The user is solely responsible and liable with respect to the application, processing or use of the provided information or product, whose quality and other properties shall be verified, or any consequence thereof. No liability whatsoever shall attach to Petro Rabigh for any infringement of the rights owned or controlled by a third party in intellectual, industrial or other property by reason of the application, processing or use of the provided information or products by the user. To the extent the user is entitled to disclose and distribute this document, the user may forward, distribute, and/or photocopy this copyrighted document only if unaltered and complete, including all of its headers, footers, disclaimers, and other information.

Kingdom of Saudi Arabia  
Petro Rabigh  
Marketing & Product Development  
Quality Assurance & Claim Handling Section  
Tel: +966 12 425 7189  
Fax: +966 12 425 8224  
www.petro-rabigh.com

# POLYPROPYLENE

## FS2011E

### Polypropylene Homopolymer for Biaxially Oriented Film

---

**Processing conditions:** Recommended Extrusion Temperature: 190 – 250 °C, Stretching Temperature: 130 – 160 °C and Stretching Ratio MD/TD: 4-7 / 7-10.

**Storage and handling:** FS2011E should be stored in a dry cool place with adequate ventilation and protected from UV-light at temperature below 50 °C. It is advisable to process polypropylene resins within 6 months after delivery.

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

Disclaimer: © Petro Rabigh. All information supplied by or on behalf of Petro Rabigh in relation to its products, whether in the nature of data, recommendations or otherwise, is supported by research and believed reliable, but Petro Rabigh assumes no liability whatsoever in respect of application, processing or use made of the provided information or products, or any consequence thereof. The user is solely responsible and liable with respect to the application, processing or use of the provided information or product, whose quality and other properties shall be verified, or any consequence thereof. No liability whatsoever shall attach to Petro Rabigh for any infringement of the rights owned or controlled by a third party in intellectual, industrial or other property by reason of the application, processing or use of the provided information or products by the user. To the extent the user is entitled to disclose and distribute this document, the user may forward, distribute, and/or photocopy this copyrighted document only if unaltered and complete, including all of its headers, footers, disclaimers, and other information.

Kingdom of Saudi Arabia  
Petro Rabigh  
Marketing & Product Development  
Quality Assurance & Claim Handling Section  
Tel: +966 12 425 7189  
Fax: +966 12 425 8224  
www.petrorabigh.com