

## Product Data Sheet

### SUMITOMO POLYPROPYLENE

## **FS3011E**

Homopolymer, Biaxially Oriented Film

Applications	For print and lamination, adhesive tape, food packaging, cigarette packaging, etc.
Characteristics	Medium flow BOPP with excellent clarity, gloss and stiffness. Excellent processability and suitable for metallization.
Typical Processing Conditions	Extrusion temperature : 190°C - 250°C Stretching temperature : 130°C - 160°C Stretching ratio MD / TD : 4 - 7 / 7 - 10

### Typical Properties

Physical		Value	Unit	Method
Melt Flow Rate	2.16kg	3.0	g/10min	ISO 1133
Density		0.900	g/cm <sup>3</sup>	ISO 1183
Mechanical		Value	Unit	Method
Tensile Strength	at Yield	32	MPa	ISO 527-1,2
	at Break	28	MPa	ISO 527-1,2
Tensile Elongation	at Yield	9	%	ISO 527-1,2
	at Break	480	%	ISO 527-1,2
Tensile Modulus		1350	MPa	ISO 527-1,2
Flexural Modulus		1255	MPa	ISO 178
Flexural Strength		37	MPa	ISO 178
Charpy Impact, 23°C	Notched	5.4	kJ/m <sup>2</sup>	ISO 179
	Unnotched	234	kJ/m <sup>2</sup>	ISO 179
Rockwell Hardness		98		ISO 2039-2
Thermal		Value	Unit	Method
Vicat Softening Temperature	10N	153	°C	ISO 306
Melting Temperature		158	°C	DSC
Crystallisation Temperature		114	°C	DSC
Heat Deflection Temperature	0.45MPa	92	°C	ISO 75
Film		Value	Unit	Method
Thickness		20	µm	
Tensile Strength at Break	MD / TD	100 / 215	MPa	ASTM D882
Tensile Elongation at Break	MD / TD	85 / 15	%	ASTM D882
Tensile Modulus, 1% Secant	MD / TD	2100 / 3850	MPa	ASTM D882
Haze		0.1	%	ASTM D1003
Gloss	45°	155	%	ASTM D2457

The values shown are typical values measured on the product and are not to be considered as guaranteed specifications, actual test results may vary  
 Test pieces preparation condition : as per ISO 1873-2  
 Film fabrication condition : monolayer film produced on pilot tenter stretching, extrusion temperature 250°C, output 60kg/hr, cast temperature 50°C  
 Standard stretching condition : MDO stretch ratio 5, temperature 145°C, TDO stretch ratio 8, temperature 157°C, relaxation 6.5%, line speed 25m/min

**Manufacturer**

FS3011E is manufactured in Saudi Arabia by Rabigh Refining & Petrochemical Co. (Petro Rabigh). Petro Rabigh is an ISO 9001, ISO 14001, and OHSAS 18001 certified company.

**Food Contact Application**

Unmodified FS3011E complies with the US FDA Regulation 21 CFR 177.1520 as well as the EU Commission Regulation 10/2011, and their respective amendments, for use in direct contact with food. Please contact your nearest SCA representative for more information.

**Restriction of Hazardous Substances**

The substances regulated under EU Directive 2011/65/EC on RoHS in electrical and electronic equipment are not used in the manufacturing process of FS3011E and are therefore not expected to be present.

**Storage and Handling**

FS3011E is supplied in 25kg bags or in bulk containers depending on packaging options available for different markets. It is advisable to store in a well ventilated storage facility, protected from rain, direct exposure to sunlight, temperature, and dust.

Moisture may accumulate inside the packaging if there is a significant fluctuation in ambient temperature and high relative humidity. If this occurs, customer is strongly advised to dry the resin prior to use. Direct exposure to sunlight and excessive ambient temperature may affect the properties, appearance, and odor characteristic of the resin.

Please refer to the Safety Data Sheet (SDS) for information regarding industrial health and safety issues.

**Disposal and the Environment**

SCA prioritizes environmental management in all our operations in responsibility and respect towards the community and the environment.

Unmodified FS3011E is readily recyclable, both for reuse via reprocessing and for energy reclamation through incineration. If disposed in landfills, our products, which are inert materials, do not pose pollution risks since they do not generate gaseous or liquid emissions.

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