

## Provisional Product Data Sheet

### SUMITOMO POLYETHYLENE LLDPE

### **FS153S**

Linear Low Density, Blown Film

Applications	For heavy duty liner, carrier bag, garment packaging, mulch film, and other general purpose film applications.
Characteristics	High strength film with excellent processability, high slip and antiblocking properties. For higher transparency, blending with LDPE is recommended.
Typical Processing Conditions	Melt Temperature 180 – 220°C Blow-up Ratio 2 – 3

### Typical Properties

Physical		Value	Unit	Method
Melt Index	2.16kg	1.1	g/10min	ASTM D1238
Density		0.923	g/cm <sup>3</sup>	ASTM D792-A
Thermal		Value	Unit	Method
Vicat Softening Temperature	10N	100	°C	ASTM D1525A
Melt Temperature		121	°C	DSC
Crystallisation Temperature		108	°C	DSC
Brittleness Temperature		< -50	°C	ASTM D746
Film		Value	Unit	Method
Tensile Strength at Break	MD / TD	38 / 31	MPa	ASTM D882
Tensile Elongation at Break	MD / TD	690 / 750	%	ASTM D882
Tensile Modulus, 1% Secant	MD / TD	215 / 260	MPa	ASTM D882
Elmendorf Tear Strength	MD / TD	160 / 345	g	ASTM D1922
Blocking Load		11	g/100cm <sup>2</sup>	ASTM D3354*
Coefficient of Friction, Exterior	μ <sub>s</sub> / μ <sub>k</sub>	0.12 / 0.09		ASTM D1894
Dart Drop Impact		125	g	ASTM D1709
Haze		16	%	ASTM D1003
Gloss	45°	50	%	ASTM D2457

\* modified

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 ASTM D 4976 and ISO 1872-2.  
Blown film extruder φ55mm, die φ125mm, die gap 2.0mm, extrusion temperature 190°C, output 25kg/hr, BUR 2.0, thickness 30μm.

**Manufacturer**

FS153S is manufactured in Saudi Arabia by Rabigh Refining & Petrochemical Co. (Petro Rabigh).

**Food Contact Application**

Unmodified FS153S complies with the US FDA Regulation 21 CFR 177.1520 as well as with the EU Directive 2002/72/EC and its 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 2002/95/EC on RoHS in electrical and electronic equipment are not used in the manufacturing process of FS153S and are therefore not expected to be present.

**Storage and Handling**

FS153S 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 characteristics of the resin.

Please refer to the Material Safety Data Sheet (MSDS) 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 world around us.

Unmodified, our polypropylene and polyethylene products are 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.

**Office Locations****SUMITOMO CHEMICAL ASIA PTE LTD**

150 Beach Road #18-05/08 Gateway West SINGAPORE 189720  
Phone +65 63035188 Fax +65 62989621 Web Site [www.sca.com.sg](http://www.sca.com.sg)

**SUMITOMO CHEMICAL ASIA PTE LTD**

Vietnam Representative Office, 7th Floor, Unit 701-3, Me Linh Point Tower, 2 Ngo Duc Ke Street, Dist. 01, Ho Chi Minh City VIETNAM  
Phone +84 8 35202767 Fax +84 8 35202911

**SUMIKA PLASTICS AND CHEMICALS TRADING (SHANGHAI) CO., LTD.**

Unit 46-07 Grand Gateway II, No.3 Hongqiao Road, Xu Hui District, Shanghai CHINA 200030  
Phone +86 21 64482255 Fax +86 21 64077365

**SUMIKA PLASTICS AND CHEMICALS TRADING (SHANGHAI) CO., LTD.**

Unit 12E-2 Block C Peace Square, Shenghe Road, Nancheng District, Dongguan, Guangdong CHINA 523071  
Phone +86 769 22887316 Fax +86 769 22887885

**SCA SOUTH ASIA PETROCHEMICALS PRIVATE LIMITED**

Sethi Chambers, Plot No.2, D.D.A. Local Shopping Centre, 2nd Floor, M.O.R. Land, New Rajinder Nagar, New Delhi, INDIA 110060  
Phone +91 11 2874 1571 Fax: +91 11 2874 1565

**SUMITOMO CHEMICAL EUROPE S.A./N.V.**

Woluwelaan, 57, B-1830 Machelen BELGIUM  
Phone +32 2 2548799 Fax +32 2 2512991 Web Site [www.sumitomo-chem.be](http://www.sumitomo-chem.be)

**SUMITOMO CHEMICAL EUROPE N.V.**

Turkey Liaison Office, Fatih Sultan Mehmet Cad. Yayabeyi Sok. Ilayda Is Mrk, No.12/2, 34810 Kavacik, Beykoz - Istanbul - TURKEY  
Phone +90 216 680 3334 Fax: +90 216 680 1012

**Disclaimer**

The values shown are typical values measured on the product and are not to be considered as guaranteed specifications. All information contained in this document is provided in good faith and believed to be reliable on the date compiled. Customer is responsible to ensure that SCA materials, whether used alone or in conjunction with other materials, are suitable for the intended application. SCA accepts no liability whatsoever for any action taken based on this information, and/or for any loss and consequential loss or damage. Please contact your nearest SCA representative for more detailed information.