

Product Data Sheet

SUMITOMO POLYPROPYLENE

FY4012E

Homopolymer, Extrusion Yarn / Raffia

Applications	For woven bags/cloth, woven fiber, carpet backing, binding tape, and monofilament.
Characteristics	Excellent denier strength, low heat shrinkage and easy processability.
Typical Processing Conditions	Extrusion temperature : 250°C Stretching temperature : 155°C Stretching ratio : 4 - 6

Typical Properties

Physical		Value	Unit	Method
Melt Flow Rate	2.16kg	4.0	g/10min	ASTM D1238
Density		0.900	g/cm ³	ASTM D792-A
Mechanical		Value	Unit	Method
Tensile Strength	at Yield	32	MPa	ASTM D638
	at Break	18	MPa	ASTM D638
Tensile Elongation	at Yield	9	%	ASTM D638
	at Break	110	%	ASTM D790
Flexural Modulus		1300	MPa	ASTM D790
Izod Impact, 23°C	Notched	3	kJ/m ²	ASTM D256
Rockwell Hardness		99		ASTM D785
Thermal		Value	Unit	Method
Vicat Softening Temperature	10N	152	°C	ASTM D1525

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 D4101



Manufacturer

FY4012E 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 FY4012E complies with the requirements of,

- US FDA Regulation 21 CFR 177.1520 and its amendments
- Regulation (EC) 1935/2004/EC (Framework), EU Commission Regulation 10/2011 (PIM), Commission Regulation (EC) No.2023/2006 (GMP), and their respective amendments

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 FY4012E and are therefore not expected to be present.

Storage and Handling

FY4012E 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 FY4012E 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.

