

**RIBLENE®**

LDPE

FM 53

Low density polyethylene

Riblene FM 53 is a low density polyethylene (LDPE), additivated with slip and antiblocking agent, suitable for blown film extrusion. Riblene FM 53 is characterised by optimum optical properties and rigidity.

Films manufactured by Riblene FM 53 are easily heat shrinkable.

Main applications

Riblene FM 53 is recommended for automatic packaging where low gauge films having a certain rigidity and gloss are required (hygienic packaging).

Main properties

Resin Properties	Test method	Unit	Value
Melt Flow Rate (190 °C/ 2.16 kg)	ISO 1133	g/10min	3.5
Density	ISO 1183	g/cm ³	0.933
Melting point	Internal method	°C	118
Brittleness point	ASTM D 746	°C	< - 75
Vicat softening point (1 kg)	ISO 306/A	°C	107

Film Properties *	Test method	Unit	Value
Tensile stress at yield	ISO 527-3 MD	MPa	14
	ISO 527-3 TD	MPa	15
Tensile strenght at break	ISO 527-3 MD	MPa	21
	ISO 527-3 TD	MPa	20
Elongation at break	ISO 527-3 MD	%	350
	ISO 527-3 TD	%	600
1% Secant modulus	ISO 527-3 MD	MPa	300
	ISO 527-3 TD	MPa	310
Elmendorf tear resistance	ISO 6383-2 MD	N/mm	50
	ISO 6383-2 TD	N/mm	65
Impact resistance F50 (Dart Drop Test)	ISO 7765-1	g	80
Dynamic coefficient of friction (COF)	ISO 8295		0.18
Haze	ISO 14782	%	9
Gloss, 45°	ASTM D 2457	%	70
Recommended film thickness		micron	18 ÷ 50

(*) Typical value for a film extruded with BUR 1:3, thickness 40 µm. Actual properties are typical and may vary depending upon operating conditions and additive package.

Processing conditions

Riblene FM 53 is easily processable using blown film technology. Melt temperature should be between 150°C and 170°C.

Recommended thickness: 18 - 50 µm.

Storage and handling

Riblene FM 53 is supplied in pellet form. This material may readily be conveyed and bulk fed through equipment designed for conventional pelletised polyethylene resin, provided the equipment is designed to prevent accumulation of the fines and dust particles that are contained in all polyethylene resins. These fines and dust particles can, under certain conditions, pose an explosion hazard. We recommend that the conveying system used be equipped with filters of adequate size, operated and maintained in such a manner to ensure that no leaks develop and earthed adequately. We further recommend that good housekeeping be practised throughout your facility.

Stored in an airy and dry room, at temperatures between 20°C and 30°C, with no direct sunlight, the shelf life is about 18 months. However, before using this product, read and understand the relevant POLIMERI EUROPA Safety Data Sheet.

Availability

Contact the POLIMERI EUROPA sales office nearest to you regarding availability and your specific application requirements.

Food contact status

Riblene FM 53 complies with the rules and regulations of the European Union, as well as other countries, regarding the use of plastic materials in food contact applications. Certificates of compliance are available upon request.

TECHNICAL SERVICE

Polimeri Europa S.p.A.
Piazza Boldrini, 1
20097 S.Donato Milanese, Italia
Tel. +39 02 520.1
Fax + 39 02 520.42901

Polimeri Europa SAS
1 Route des Dunes BP 59
F-59279 MARDYCK - France
Tel. +33 3 28235514
Fax +33 3 28235520

Polimeri Europa S.p.A.
Via Taliercio, 14
46100 Mantova, Italia
Tel. +39 0376 305504
Fax + 39 0376 305299

HEADQUARTER

Polimeri Europa S.p.A.
Piazza Boldrini, 1
20097 San Donato Milanese, Milano - Italia
Tel. +39 02 520.1
Fax + 39 02 520.42901

IMPORTANT: please consult the relevant safety data sheet for more detailed information. The information and data presented herein are to the best of our knowledge true and accurate but no warranty or guarantee, expressed or implied, is made nor is any liability accepted with respect to the use of such information and data.

Polimeri Europa is available to provide the guaranteed values for each product on demand.