

RIBLENE®

LDPE

FL 23 I

Low density polyethylene

Riblene FL 23 I is a low density polyethylene (LDPE) additivated with slip agent, ideal for blown film extrusion. Riblene FL 23 I is characterised by a good balance between processability and mechanical properties.

Films manufactured with Riblene FL 23 I are easily heat shrinkable and characterised by good optical and mechanical properties.

Main Applications

Riblene FL 23 I is recommended for general blown film applications, for the production of low gauge film and shrink film, for lamination and for blending.

Main Properties

Resin Properties	Value	Unit	Test Method
Melt Flow Rate (190 °C/2.16 kg)	2.2	g/10min	ISO 1133
Melt Flow Rate (190 °C/5 kg)	-	g/10min	ISO 1133
Melt Flow Rate (190 °C/21.6 kg)	-	g/10min	ISO 1133
Density	0.923	g/cm ³	ISO 1183
Melting Point	113	°C	Internal method
Brittleness temperature	<- 75	°C	ASTM D 746
Vicat softening point (1 kg)	93	°C	ISO 306/A

Film Properties *	Value	Unit	Test Method
Tensile stress at yield MD	11	MPa	ISO 527-3
Tensile stress at yield TD	11	MPa	ISO 527-3
Tensile stress at break MD	25	MPa	ISO 527-3
Tensile stress at break TD	22	MPa	ISO 527-3
Elongation at break MD	300	%	ISO 527-3
Elongation at break TD	650	%	ISO 527-3
1% Secant modulus MD	180	MPa	ISO 527-3
1% Secant modulus TD	190	MPa	ISO 527-3
Elmendorf tear resistance MD	80	N/mm	ISO 6383-2
Elmendorf tear resistance TD	55	N/mm	ISO 6383-2
Impact resistance F50 (Dart Drop Test)	125	g	ISO 7765-1/A
Dynamic coefficient of friction (COF)	0.13	-	ISO 8295
Haze	5.5	%	ISO 14782
Gloss, 45°	72	%	ASTM D 2457
Recommended film thickness	25 ÷ 80	micron	-



Processing notes

Riblene FL 23 I is easily processable using blown film technology. Melt temperature should be between 160°C and 190°C.

Recommended thickness: 25 - 80 µm.

Storage and Handling

Riblene FL 23 I 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 should be practised throughout your facility.

The product should be stored in dry conditions at temperatures below 50°C and protected from sunlight.

Improper storage can initiate degradation which results in odour generation, colour changes and can have negative effects on the physical properties of the product.

Before using this product it is recommended to read and understand the relevant Safety Data Sheet.

Availability

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

Food Contact Status

Riblene FL 23 I 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.

