



RIBLENE® FM 53 F BA

LDPE
Low density polyethylene bio attributed



SUSTAINABILITY

The product Riblene FM 53 F BA 'Bio attributed' is a highly sustainable LDPE produced using bionafta from renewable raw materials together with traditional raw materials. In order to attribute the sustainable feedstock component to the final product Versalis applies the Mass Balance approach, a recognized methodology that allows to trace the flow of materials along the value chain and to assign the sustainability characteristic of the raw material to the final product on a documentary basis. Riblene FM 53 F BA provides the same chemical composition and physical-mechanical performance of the traditional grade, in addition is accompanied by a sustainability declaration that certifies the share of bio attributed product. It is a low-density polyethylene additivated with slip and antiblocking agent, suitable for blown film technology. The production of Riblene FM 53 F BA allows to contribute to the circular economy, since the bionafta used derives from waste from renewable resources (e.g. vegetable oils). Riblene FM 53 F BA will be bio attributed for 100%. The exact amount of 'bio attributed' product will be reported in the sustainability certificate issued upon the delivery of the product.

MAIN PROPERTIES

Resin Properties	Value	Unit	Test method
Melt Flow Rate (190 °C/2,16 kg)	3,1	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	0,933	g/cm ³	ISO 1183
Melting Point	117	°C	Metodo interno
Brittleness temperature	< -75	°C	ASTM D 746
Vicat softening point (1 kg)	107	°C	ISO 306/A
Film Properties *	Value	Unit	Test method
Tensile stress at yield MD	14	MPa	ISO 527-3
Tensile stress at yield TD	15	MPa	ISO 527-3
Tensile stress at break MD	21	MPa	ISO 527-3
Tensile stress at break TD	20	MPa	ISO 527-3
Elongation at break MD	350	%	ISO 527-3
Elongation at break TD	600	%	ISO 527-3
1% Secant modulus MD	300	MPa	ISO 527-3
1% Secant modulus TD	310	MPa	ISO 527-3
Elmendorf tear resistance MD	50	N/mm	ISO 6383-2
Elmendorf tear resistance TD	65	N/mm	ISO 6383-2
Impact resistance F50 (Dart Drop Test)	80	g	ISO 7765-1/A
Dynamic coefficient of friction (COF)	0,14	-	ISO 8295
Haze	7	%	ISO 14782
Gloss, 45°	70	%	ASTM D 2457
Recommended film thickness	18 ÷ 50	micron	-





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MAIN APPLICATIONS

Riblene FM 53 F BA is recommended for automatic packaging where low gauge films having a certain rigidity and gloss are required (hygienic packaging). Films manufactured by Riblene FM 53 F BA are easily heat shrinkable.

PROCESSING NOTES

Riblene FM 53 F BA 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 F BA is supplied in pellet form. This material may readily be conveyed and bulk fed through equipment designed for conventional pelletized 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 practiced 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 odor generation, color 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 FM 53 F BA 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.

