



versalis

[www.versalis.eni.com](http://www.versalis.eni.com)

# Technical Data Sheet

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## RIBLENE®

## FL 20 R

LDPE

Low density polyethylene

Riblene FL 20 R is a low density polyethylene (LDPE) suitable for blown film extrusion. Riblene FL 20 R is characterised by a good balance between processability and mechanical properties.

Films manufactured by Riblene FL 20 R are easily heat shrinkable and have good optical properties.

### Main Applications

Riblene FL 20 R is recommended for general packaging film, for the production of low gauge and shrink film and for blend.

### 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	0.921	g/cm <sup>3</sup>	ISO 1183
Melting Point	109	°C	Internal method
Brittleness temperature	<- 75	°C	ASTM D 746
Vicat softening point (1 kg)	90	°C	ISO 306/A

Film Properties *	Value	Unit	Test Method
Tensile stress at yield MD	10	MPa	ISO 527-3
Tensile stress at yield TD	10	MPa	ISO 527-3
Tensile stress at break MD	25	MPa	ISO 527-3
Tensile stress at break TD	19	MPa	ISO 527-3
Elongation at break MD	300	%	ISO 527-3
Elongation at break TD	550	%	ISO 527-3
1% Secant modulus MD	160	MPa	ISO 527-3
1% Secant modulus TD	180	MPa	ISO 527-3
Elmendorf tear resistance MD	70	N/mm	ISO 6383-2
Elmendorf tear resistance TD	45	N/mm	ISO 6383-2
Impact resistance F50 (Dart Drop Test)	190	g	ISO 7765-1/A
Dynamic coefficient of friction (COF)	> 0.5	-	ISO 8295
Haze	9	%	ISO 14782
Gloss, 45°	54	%	ASTM D 2457
Recommended film thickness	25 ÷ 80	micron	-

(\*) 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.

R= Made in Ferrara (Italy)

## Processing notes

Riblene FL 20 R 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 20 R 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 20 R 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.

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**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.

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