Technical Data Sheet

RIBLENE ®

LDPE

MR 10 R

Low density polyethylene

Riblene MR 10 R is a high fluidity low density polyethylene resin (LDPE).

Parts made by Riblene MR 10 R are characterised by a high flexibility.

Main Application

Riblene MR 10 R is suitable for injection moulding and compound applications. Riblene MR 10 R is recommended for large complex mouldings, artificial flowers and low thickness articles. Thanks to its fluidity, the resin can be used as base for masterbatches.

Main Properties

Resin Properties	Value	Unit	Test Method
Melt Flow Rate (190 °C/2.16 kg)	20	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	0.918	g/cm3	ISO 1183
Melting point	107	°C	Internal method
Brittleness temperature	<- 20	°C	ASTM D 746
Vicat softening point (1 kg)	84	°C	ISO 306/A

Mechanical Properties *	Value	Unit	Test Method
Tensile stress at yield	10	MPa	ISO 527
Tensile stress at break	-	MPa	ISO 527
Tensile strain at yield	-	%	ISO 527
Elongation at break	-	%	ISO 527
Flexural modulus	120	MPa	ISO 178
Hardness Shore D	45	-	ISO 868 A
Falling Weight:	-	J/mm	ISO 6603-2
Izod impact strength, notched	-	J/m	ISO 180/A
Environmental Stress Cracking Resistance (ESCR)	-	h	ASTM 1693/B

Processing notes

Processing conditions are depending on several parameters: the shape of the part to be manufactured, the localisation of the injection point, the injection moulding machine and the cooling of the mould.

Processing conditions:

Temperature profile of the barrel	(°C)	160 - 200
Temperature of the mould	(°C)	10 - 30

Storage and Handling

Riblene MR 10 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 MR 10 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.