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Technical data sheet

ERACLENE ®

PF 92

HDPE

High density polyethylene

Eraclene PF 92 is a homopolymer high density polyethylene resin (HDPE), with antioxidants, suitable for pipe application.
It is characterized by high rigidity, high impact strength and low swelling. Eraclene PF 92 has an intermediate molecular weight distribution which perfectly balances overall performances with ease of processing.

Main Application

Eraclene PF 92 is recommended for the production of structured wall pipes when high rigidity is required. It can be used for the production of sheets and profiles.

Main Properties

Resin Properties	Value	Unit	Test Method
Melt Flow Rate (190 °C/2,16 kg)	0,7	g/10min	ISO 1133
Melt Flow Rate (190 °C/5 kg)	2.6	g/10min	ISO 1133
Melt Flow Rate (190 °C/21,6 kg)	45	g/10min	ISO 1133
Density	0,960	g/cm3	ISO 1183
Melting point	134	°C	Internal method
Brittleness temperature	< -60	°C	ASTM D 746
Vicat softening point (1 kg)	128	°C	ISO 306/A

Mechanical Properties *	Value	Unit	Test Method
Tensile stress at yield	31	MPa	ISO 527
Tensile stress at break	30	MPa	ISO 527
Tensile strain at yield	-	%	ISO 527
Elongation at break	> 800	%	ISO 527
Flexural modulus	1500	MPa	ISO 178
Hardness Shore D	66	-	ISO 868 A
Falling Weight	-	J	ISO 6603-2
Izod impact strength, notched	-	J/m	ASTM D 256
Environmental Stress Cracking Resistance (ESCR)	-	h	ASTM D 1693 (B)

(*) Values are referred to compression moulded specimens. Actual properties are typical and may vary depending upon operating conditions.

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Processing notes

Eraclene PF 92 can be processed in the latest high speed extrusion lines with excellent results.
Typical moulding conditions:

Temperature setting, barrel zone 1	(°C) 170 - 180
Temperature setting, barrel zone 2-4	(°C) 185 - 195
Temperature setting, head and die	(°C) 185 - 195
Operation temperature	(°C) 210 - 220

Storage and Handling

Eraclene PF 92 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

Eraclene PF 92 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 Management Polyethylene

Center and South Europe and Americas

Versalis S.p.A.

Head Office
Piazza Boldrini 1 - 20097 San Donato Milanese (MI) - Italy
tel. +39 0252032998 +39 0252042262
+39 0252042005 +39 0252032072
+39 0252042984

Mantova
Via Taliercio 14 - 46100 Mantova (MN) - Italy
tel. +39 0376305520 +39 0376305620

North Europe and ROW

Versalis S.p.A.

4531 Route des Dunes - CS 20060 Mardyck
59279 Dunkerque - France
tel. +33 328235516 +33 328235512

Duesseldorfer Str. 13 65760
Eschborn - Germany
tel. +49 15140260561

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.
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