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Technical data sheet

ERACLENE ®

BC 82

HDPE

High density polyethylene

Eraclene BC 82 is a high density polyethylene resin (HDPE), with antioxidants, suitable for blow moulding application.
It is especially recommended for the production of containers up to 20 liters. Eraclene BC 82 combines a good stress cracking resistance with a good rigidity and impact strength. This resin exhibits a high melt strength together with a moderate swelling. Eraclene BC 82 is characterized by an intermediate molecular weight distribution which balances overall performances with ease of processing.

Main Application

Eraclene BC 82 is used to produce, with high-speed machines, blow moulded containers for household and industrial chemicals (detergents, bleaches, etc), cosmetics (shampoos, creams, lotions, etc.). Eraclene BC 82 is suitable for thin wall items and can be extruded into profiles and sheets.

Main Properties

Resin Properties	Value	Unit	Test Method
Melt Flow Rate (190 °C/2,16 kg)	0,25	g/10min	ISO 1133
Melt Flow Rate (190 °C/5 kg)	0,9	g/10min	ISO 1133
Melt Flow Rate (190 °C/21,6 kg)	23	g/10min	ISO 1133
Density	0,954	g/cm3	ISO 1183
Melting point	132	°C	Internal method
Brittleness temperature	< -60	°C	ASTM D 746
Vicat softening point (1 kg)	125	°C	ISO 306/A

Mechanical Properties *	Value	Unit	Test Method
Tensile stress at yield	27	MPa	ISO 527
Tensile stress at break	30	MPa	ISO 527
Tensile strain at yield	-	%	ISO 527
Elongation at break	> 600	%	ISO 527
Flexural modulus	1200	MPa	ISO 178
Hardness Shore D	64	-	ISO 868 A
Falling Weight	-	J	ISO 6603-2
Izod impact strength, notched	180	J/m	ASTM D 256
Environmental Stress Cracking Resistance (ESCR) **	> 60	h	ASTM D 1693 (B)

(*) Values are referred to compression moulded specimens. Actual properties are typical and may vary depending upon operating conditions.
(**) 100% surface-active agent – Condition B.

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Processing notes

Eraclene BC 82 can be processed in the latest high speed blow molding machines with excellent results. Moulded parts exhibit outstanding surface quality. Trimming is excellent.
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) 195 - 205

Storage and Handling

Eraclene BC 82 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 BC 82 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

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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.
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