Technical Data Sheet

ERACLENE ®

BC 82 L

HDPE

High density polyethylene

Eraclene BC 82 L 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 L combines a very 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 L is characterized by an intermediate molecular weight distribution which balances overall performances with ease of processing.

Main Application

Eraclene BC 82 L is used to produce, with high-speed machines, blow moulded containers for household and industrial chemicals (detergents, bleaches, etc), cosmetics (shampoos, creams, lotions, etc.), health and medical aids. Eraclene BC 82 L 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	0.950	g/cm3	ISO 1183
Melting point	134	°C	Internal method
Brittleness temperature	<- 60	°C	ASTM D 746
Vicat softening point (1 kg)	123	°C	ISO 306/A

Mechanical Properties *	**Value**	**Unit**	**Test Method**
Tensile stress at yield	26	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	1100	MPa	ISO 178
Hardness Shore D	63	-	ISO 868 A
Falling Weight:	-	J/mm	ISO 6603-2
Izod impact strength, notched	180	J/m	ISO 180/A
Environmental Stress Cracking Resistance (ESCR)	> 150	h	ASTM 1693/B

Processing notes

Eraclene BC 82 L 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
This material, when properly converted, allows obtaining a finished item having excellent final properties. Such properties depend from an adequate item design and by the thickness distribution along the walls. Suggested temperatures to obtain such results are the following:
Barrel Zone 1 Temperature Setting (°C) 170°-180
Barrel Zone 2 Temperature Setting (°C) 185-195
Head and Die Temperature Setting (°C) 185-195
operation Temperature (°C) 195-205

Storage and Handling

Eraclene BC 82 L 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 L 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.