Technical Data Sheet

IPETHENE® 320

Low Density Polyethylene

Product Description

IPETHENE® 320 is a low-density polyethylene film grade, produced by high-pressure autoclave technology.

Features:	• No additives • Excellent optical properties • Excellent film quality	• Excellent draw-down • Good processability
Uses:	• Multilayer and lamination films • Pouches • High clarity films	• High quality film master-batches • Bubble films • Squeezable bottles
Processing Methods:	• Blown film extrusion • Blow molding • Cast film extrusion	• Compounding • Foaming • Injection Molding

Properties		Method	Typical Value*	Unit
Physical				
Melt Flow Rate	(190°C/2.16 kg)	ISO 1133	2.0	g/10 min
Density		ISO 1183-A	0.920	g/cm^3
Thermal				
Peak Melting Temperature	By DSC	ISO 11357-3	109	°C
Vicat Softening Temperature	(10 N)	ISO 306	93	°C
Mechanical**				
Dart Drop Impact	(F_{50})	ISO 7765-A	200	g
Tensile Stress at Break	(MD/TD)	ISO 527-3	24/21	MPa
Tensile Strain at Break	(MD/TD)	ISO 527-3	500/750	%
Optical**				
Haze		ASTM D 1003	5.5	%
Gloss	(45°)	ASTM D 2457	85	%

*Typical values; not to be construed as specifications.
** Measured on 50 µm blown film, Blow-up ratio 2.5:1, output 10 kg/h, melt temperature ~170°C.

Processing Recommendations

IPETHENE® 320 can be easily processed on conventional extruders at melt temperature range 155-180°C. Due to differences in screw and die head designs, processing conditions should be optimized for each production line. With suitable equipment, it can be drawn down to 25 µm films.

Health, Quality, Regulations and Safety

This product is not classified as dangerous substance. Material safety data sheets, international standards certificates (e.g. ISO 9001) and other regulatory documents are available on our website. Carmel Olefins products have not been tested and therefore not validated for use in pharmaceutical/medical applications, and their suitability for these uses cannot be guaranteed. It is the customer's responsibility to test and approve their technical and regulatory suitability in order to satisfy themselves as to the particular purpose and application(s).

Carmel Olefins Ltd. POB 1468 Haifa 31014 Israel
Website: http://www.Carmel-Olefins.co.il
Email: techserv@caol.co.il

Date: May 2021

The information contained herein is to our knowledge accurate and reliable as of the date of publication. Carmel Olefins recommends its customers to review both the manufacturing processes and applications of Carmel Olefins products to ensure, that the products are not used for purposes they are not intended or tested for. Carmel Olefins extends no warranties and makes no representations as to the accuracy or completeness of the information contained herein and assumes no responsibility regarding the consequences of its use or for any printing errors. Our products are intended for sale to industrial and commercial customers. Data in this document relates only to the specific product and may not be valid for any combination of this product with other materials. It is the customer's responsibility to inspect and test our products in order to satisfy himself as to the suitability of the products for the customer's particular purpose. The customer is responsible for its employees' safety and the appropriate, safe and legal use, processing, handling and disposing of our products and packaging. Carmel Olefins shall not be liable for any consequential, incidental or indirect damages resulting from this statement or its use.