EFDC-7050 LLDPE Film Extrusion Resin

DESCRIPTION

EFDC-7050 is a linear low-density polyethylene (LLDPE) resin for tubular blown film extrusion. Films extruded from EFDC-7050 have good toughness and high tensile strength and puncture resistance. The product offers excellent draw down capability for making thinner gauge films. EFDC-7050 contains high levels of slip and antiblocking agent. It offers excellent sealing and machining characteristics for high-speed film converting operations.

APPLICATIONS

EFDC-7050 is recommended for the manufacture of thin gauge liner films, garment bags and films for other industrial, food packaging and other general-purpose applications requiring toughness and puncture resistance.

TYPICAL PROPERTIES

Properties		Units	Test Method	Typical Value
Resin Properties				
Melt Index, $I_{2.16}$		g/10 min	ASTM D 1238	2.0
Density		g/cm^3	ASTM D792	0.918
Melting Point		°C	EQUATE	124
Bulk Density		Kg/m^3	ASTM D 1895	530
Blown Film Properties*				
Gauge		Microns		25
Tensile Strength@ Break	MD	MPa	ASTM D 882	31
	TD			23
1% Secant Modulus	MD	MPa	ASTM D 882	195
	TD			220
Elmendorf Tear	MD	N/mm	ASTM D 1922	31
	TD			124
Dart Impact, F_{50}		g	ASTM D 1709 A	90
Puncture Energy		J/mm	EQUATE	60
Haze		%	ASTM D 1003	13
Gloss, 45°		-	ASTM D 2457	55

* Film properties are typical of blown film extruded at 2:1 blow-up ratio.
Actual properties may vary depending upon operating conditions and additive package.
ASTM: American Society for Testing and Materials

TYPICAL EXTRUSION CONDITIONS

Property	Condition
Barrel Zone 1, ºC	170
Barrel Zone 2, ºC	180
Barrel Zone 3, ºC	185
Barrel Zone 4 , ºC	180
Adapter, ºC	180
Head and Die, ºC	180
Melt Temperature,	180
Die Gap, mm	> 1.8

FOOD CONTACT USAGE

EFDC-7050 meets US FDA and EC regulations for food contact use. Specific certificates are available upon request.

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AVAILABILITY

EFDC-7050 is supplied in 25-Kg bags in secured pallets of 55 bags (1.375 MT net). It is also supplied in sea bulk containers of up to 20 MT.

STORAGE AND HANDLING

EFDC-7050 is supplied in pellet form and is readily conveyed on conventional polyethylene bulk handing equipment. The bulk handling system should be designed to prevent accumulation of fines and dust particles that can pose an explosion hazard. Ensure all equipment is properly grounded. The product should be stored in a cool dry shaded area away from dust, sunlight and heat. For more details on storage and handling see our Polyethylene Storage and Handling Guide. Also carefully review the Material Safety Data Sheet supplied with this product for health, safety and waste considerations.

IMPORTANT NOTICE

The information supplied in this bulletin to the best of our knowledge is accurate and factual as of the date printed. It is offered solely as a convenience to EQUATE's customers and is intended only as a guide for EFDC-7050. Since the user's specific applications and conditions of use are beyond EQUATE's control, EQUATE makes no warranty or representation regarding results that may be obtained by the user. It shall be the responsibility of the user to determine the suitability of the product for the user's specific application. The information disclosed in this document is not to be construed as a recommendation to use the product in infringement of any patent rights covering the usage.

NOTICE REGARDING MEDICAL APPLICATION RESTRICTIONS

EQUATE Petrochemical Company does not recommend any EQUATE product or sample product for use: (A) in any commercial or developmental application which is intended for contact with human internal body fluids or body tissues, regardless of the length of time involved. (B) in any cardiac prosthetic device application, regardless of the length of the time involved, including, without limitation, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems, and ventricular bypass assisted devices; (C) as a critical component in any medical device that supports or sustains human life; and (D) specifically by pregnant women or in any applications designed specifically to promote or interfere with human reproduction.

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