EGDA-6888 HDPE Film Extrusion Resin

DESCRIPTION

EGDA-6888 is a high molecular weight, high density polyethylene copolymer that has been designed specifically for tubular film extrusion. Its broad molecular weight distribution and density have been optimized to give excellent bubble stability at high extrusion rates with high film strength and rigidity. The combination of high strength and excellent drawdown-ability makes EGDA-6888 ideal for down gauging in many applications.

APPLICATIONS

Tubular films produced from EGDA-6888 are recommended for high strength grocery sacks, shopping bags, produce bags and high quality thin films for multiwall sack liners and replacements for thin paper products. EGDA-6888 is also suitable for making non-pressure "gravity" pipes for drainage and sewage applications.

TYPICAL PROPERTIES

Properties		Units	Test Method	Typical Value
Resin Properties				
Melt Flow Index, $I_{21.6}$		g/10 min	ASTM D1238	10
Density at 23°C		g/cm^3	ASTM D792	0.952
Melting Point		°C	EQUATE	131
Bulk Density		kg/m^3	ASTM D1895	560
Blown Film Properties* at 15 microns				
Dart Impact, F_{50}		g	ASTM D1709 A	170
Elmendorf Tear	MD	N/mm	ASTM D1922	70
	TD			150
1% Secant Modulus	MD	MPa	ASTM D882	1220
	TD			1470
Tensile Strength @ Break	MD	MPa	ASTM D882	60
	TD			57
Elongation	MD	%	ASTM D882	380
	TD			550

* Film properties are typical of blown films extruded at a 4:1 blow-up ratio and melt temperature of 215°C.
ASTM: American Society for Testing and Materials

EXTRUSION CONDITIONS

EGDA-6888 can be extruded on conventional HDPE blown film equipment at 215°C melt temperature. A flat or moderately increasing temperature profile is recommended for its extrusion.

A 4:1 blow-up ratio and high stalk bubble configuration are always recommended for products requiring high strength. Lower blow-up ratios (3:1) can be used for products that do not require high strength.

For best gauge uniformity, a minimum extrusion rate of 0.14 kgs/hr/mm of die circumference is recommended. The best balance of extrudability and film strength is obtained with a 1.0 to 1.1 mm die gap.

FOOD CONTACT USAGE

EGDA-6888 can be used for all food contact applications including holding food during cooking. It conforms to US FDA Regulation 21 CFR 177.1520 as well as EC Directive 90/128/EEC and its amendments to-date. Food contact suitability certificate is available upon request.

AVAILABILITY

EGDA-6888 is supplied in 25 Kg bags in secured pallets of 55 bags (1.375 MT net). It is also supplied in sea bulk container of up to 20 MT.

STORAGE AND HANDLING

EGDA-6888 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 EGDA-6888. 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.

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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.