EMDA-6147 HDPE Blow Molding Resin

DESCRIPTION

EMDA-6147 is a high density polyethylene copolymer resin designed for blow molding of large size containers. Its high molecular weight and broad molecular weight distribution with a balanced density provide excellent mold-ability, toughness and stress-cracking resistance. The molded articles exhibit good surface attributes.

APPLICATIONS

EMDA-6147 is suitable for blow molding of closed head shipping containers of up to 50 liter size, fuel tanks, drums, jerry cans and other similar parts. The molded parts have smooth surfaces that can be readily treated for high quality printing. The containers may be utilized for packaging a variety of aggressive materials, such as, industrial chemicals, latex paint, printing inks and adhesives. Foodstuff can also be packaged in the containers in line with conformity of the resin with food contact regulations. EMDA-6147 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 Index, $I_{2.16}$	g/10 min	ASTM D 1238	0.07
High Load Melt Index, $I_{21.6}$	g/10 min	ASTM D 1238	9
Density	g/cm^3	ASTM D792	0.952
Thermal Properties			
Vicat Softening Temperature	°C	ASTM D 1525	125
Melting Point	°C	EQUATE	131
Crystallization Point	°C	EQUATE	116
Mechanical Properties			
Tensile Strength at Yield	MPa	ASTM D 638	26
Ultimate Tensile Strength	MPa	ASTM D 638	35
Ultimate Tensile Elongation	%	ASTM D 638	> 750
Flexural Modulus	MPa	ASTM D 790	1180
Izod Impact Strength	KJ/m^2	ASTM D 256	17
$ESCR^+$, F_{50}	Hours	ASTM D 1693 B	1000

+ Environmental Stress-Cracking Resistance 100% Igepal, 50° C
ASTM: American Society for Testing and Materials

TYPICAL MOLDING CONDITIONS

Molding Temperatures for Intermittent Machines	
Barrel Zone 1, °C	204
Barrel Zone 2-4, °C	204
Head and Die, °C	204
Melt Temperature, °C	210

FOOD CONTACT USAGE

EMDA-6147 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

EMDA-6147 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

EMDA-6147 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 EMDA-6147. 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

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THIEN AN PLASTICS | thienanplastics.com | Hotline / Zalo / WeChat / WhatsApp: +84 389 980 742