SABIC® LLDPE R50035E

LINEAR LOW DENSITY POLYETHYLENE FOR ROTATIONAL MOLDING

DESCRIPTION

R50035E is a Linear Low Density Polyethylene grade with balanced density and viscosity designed to provide excellent stress cracking resistance, good mechanical properties with high rigidity, toughness, and low warpage. R50035E is an antioxidant and UV stabilized grade in pellet form.

TYPICAL APPLICATIONS

Rotational molding of water tanks, industrial and agricultural tanks and containers. General purpose rotomolding articles where easy processing is required.

TYPICAL PROPERTY VALUES

Revision 20221213

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES (1)			
Melt Flow Rate (MFR)			
at 190°C and 2.16 kg	5	g/10 min	ASTM D1238
Density	935	kg/m³	ASTM D1505
MECHANICAL PROPERTIES (2)			
Tensile Properties (2)			
stress @ break	17	MPa	ASTM D638
strain @ break	590	%	ASTM D638
stress @ yield	16	MPa	ASTM D638
Flexural properties			
Flexural Strength	13	MPa	ASTM D790
Flexural Modulus (1% Secant)	420	MPa	ASTM D790
Hardness Shore D (2)	66	-	ISO 868
ESCR (100% Igepal CO-630), F50 (2)	>150	h	ASTM D1693A
THERMAL PROPERTIES			
Vicat Softening Temperature	114	°C	ASTM D1525
Brittleness Temperature	<-75	°C	ASTM D746

(1) Typical values; not to be construed as specification limits.
(2) Based on injection molded specimens

PROCESSING CONDITIONS

Typical processing conditions for R50035E are:

Oven temperature: 315°C

Molding cycles vary with mold composition and its thickness, oven temperature and well thickness of part being produced. Venting of the mold is recommended.

Processing temperature for compounding extruders: 200- 240°C.

FOOD REGULATION

Detailed information is provided in the relevant Material Safety Datasheet and or Standard Food Declaration, available on the Internet (www.SABIC.com). Additional specific information can be requested via your local Sales Office."

DISCLAIMER: This product is not intended for and must not be used in any pharmaceutical/medical applications.

STORAGE AND HANDLING

Polyethylene resin should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably do not exceed 50°C. SABIC would not give warranty to bad storage conditions, which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PE resin within 6 months after delivery.

DISCLAIMER

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