

SABIC® LLDPE R40035E

HEXENE LINEAR LOW DENSITY POLYETHYLENE FOR ROTATIONAL MOLDING

DESCRIPTION

R40035E is a Hexene Linear Low Density Polyethylene grade with balanced density and viscosity designed to provide excellent stress cracking resistance, excellent mechanical properties with high rigidity, toughness, and low warpage. R40035E is an antioxidant and UV stabilized grade in pellet form.

TYPICAL APPLICATIONS

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

TYPICAL PROPERTY VALUES

Revision 20260412

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES ⁽¹⁾			
Melt Flow Rate (MFR)			
at 190°C and 2.16 kg	4	g/10 min	ASTM D1238
Density	935	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES ⁽²⁾			
ESCR (10% Igepal), F50	>350	Hrs	ASTM D1693B
ESCR (100% Igepal), F50	>1000	Hrs	ASTM D1693B
Flexural Strength	13	MPa	ASTM D790
Flexural Modulus (1% Secant)	>400	MPa	ASTM D790 A
Hardness Shore D	66	-	ISO 868
Tensile test			
stress @ break	17	MPa	ASTM D638
strain @ break	590	%	ASTM D638
stress @ yield	16	MPa	ASTM D638
THERMAL PROPERTIES			
Vicat Softening Temperature	115	°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 R40035E 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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