

POLYMERS

SABIC[®] LLDPE R50035 Series

Linear Low Density Polyethylene for Rotational Molding & Compounding

Revision Date Jan, 2016

PRODUCT DESCRIPTION:

R50035 series are 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. R50035 series include the following grades:

R50035 : Non-UV stabilized grade in pellet form

R50035E : Antioxidant and UV stabilized grade in pellet form

RG50035 : Non-UV stabilized reactor powder grade

TYPICAL APPLICATIONS:

Rotational molding of water tanks, industrial and agricultural tanks and containers. General purpose rotomolding articles where easy processing is required. RG50035 is typically suitable as carrier resin for producing compounds and masterbatches.

TYPICAL PROPERTY VALUES:

RESIN PROPERTIES	UNIT	VALUE ⁽¹⁾	ASTM METHOD
Melt Flow Rate @ 190°C & 2.16 Kg load	g/10 min.	5	D 1238
Density	Kg/m ³	935	D 1505
MECHANICAL PROPERTIES⁽²⁾			
Tensile Strength @ break	MPa	17	D 638
Tensile Elongation @ break	%	590	D 638
Tensile Strength @ yield	MPa	16	D 638
1% Secant Modulus	MPa	420	D 790
Flexural Strength	MPa	13	D 790
Hardness (Shore D)	-	66	D2240
ESCR (100% Igepal), F ₅₀	Hrs	>150	D1693B
THERMAL PROPERTIES			
Vicat Softening Point	°C	114	D 1525
Brittleness Temperature	°C	<-75	D 746

(1) Typical values; not to be construed as specification limits.

(2) Based on injection molded specimens

PROCESSING CONDITIONS:

Typical processing conditions for R50035 and 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:

R50035 series resins are suitable for Food contact application. Detailed information is provided in relevant Material Safety Datasheet and for additional specific information please contact SABIC local representative for certificate.

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

STORAGE & 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.

CONTACT US:

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