

# SABIC® LLDPE RG50035

LINEAR LOW DENSITY POLYETHYLENE FOR COMPOUNDING AND ROTATIONAL MOLDING

## DESCRIPTION

RG50035 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. RG50035 is a 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

Revision 20201215

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES <sup>(1)</sup></b>			
<b>Melt Flow Rate (MFR)</b>			
at 190°C and 2.16 kg	5	g/10 min	ASTM D1238
<b>Density</b>	935	kg/m <sup>3</sup>	ASTM D1505
<b>MECHANICAL PROPERTIES <sup>(2)</sup></b>			
<b>Tensile Properties</b>			
stress at break	17	MPa	ASTM D638
strain at break	590	%	ASTM D638
stress at yield	16	MPa	ASTM D638
1% secant modulus	420	MPa	ASTM D638
<b>Flexural Strength</b>	13	MPa	ASTM D790
<b>Hardness (Shore D)</b>	66	-	ASTM D2240
<b>ESCR (100% Igepal CO-630), F50</b>	>150	h	ASTM D1693A
<b>THERMAL PROPERTIES</b>			
<b>Vicat Softening Temperature</b>	114	°C	ASTM D1525
<b>Brittleness Temperature</b>	<-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 R50035 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](http://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.

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