

# SABIC® LLDPE R50035

LINEAR LOW DENSITY POLYETHYLENE FOR ROTATIONAL MOLDING

## DESCRIPTION

R50035 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. R50035 is a non-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 20230526

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 @ break	17	MPa	ASTM D638
strain @ break	590	%	ASTM D638
stress @ yield	16	MPa	ASTM D638
<b>Flexural properties</b>			
Flexural Strength	13	MPa	ASTM D790
Flexural Modulus (1% Secant)	420	MPa	ASTM D790
<b>Hardness (Shore D)</b>	66	-	ASTM D2240
<b>ESCR (100% Igepal),F50</b>	>150	Hrs	ASTM D1693B
<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.

## 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.

## DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.