

# 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

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.