

SABIC® LLDPE R50035EE

LINEAR LOW DENSITY POLYETHYLENE

DESCRIPTION

SABIC® LLDPE R50035EE is a LLDPE copolymer that provides good stress crack resistance, rigidity, toughness, gloss and very low warpage. The resin contains UV stabilizer. It is recommended that SABIC® LLDPE R50035EE is grinded before use in rotational moulding applications.

Typical Applications.

SABIC® LLDPE R50035EE is used for rotational moulding of large industrial and agricultural tanks, trash containers and chemical shipping drums. Because of its good mechanical properties and low warpage, it is used for injection moulding of screw closures, caps and housewares. SABIC® LLDPE R50035EE is UV stabilised; which provides good protection for the final product.

Processing conditions.

Oven temperature °C (°F) = 315 (600)

Typical processing temperature for injection moulding machines: 210 - 240 °C.

Mechanical properties.

Test specimens are prepared from compression moulded sheet made according to ASTM D-1928, procedure C.

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

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190 °C and 2.16 kg	5.0	dg/min	ASTM D1238
Density	933	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
Tensile test			
stress at break	17	MPa	ASTM D638
stress at yield	16	MPa	ASTM D638
strain at break	590	%	ASTM D638
Flexural test			
Flexural strength	13	MPa	ASTM D790
Secant modulus at 1% elongation	420	MPa	ASTM D790
Hardness Shore D	66	-	ISO 868
ESCR (100% Igepal CO-630), F50	>150	h	ASTM D1693A
THERMAL PROPERTIES			
Vicat Softening Temperature			
	114	°C	ASTM D1525
Brittleness Temperature	<-75	°C	ASTM D746