

TECHNICAL DATA SHEET

rototech R36I45

LLDPE (Linear Low-Density Polyethylene) Powder for Rotomoulding

DESCRIPTION

- rototech R36I45 is a Low-Density Linear Polyethylene Resin (LLDPE) in powder form, additives with antioxidants and UV stabilizers. It is suitable for Roto Moulding applications. Items produced by rototech have a very good balance between mechanical properties and ESCR resistance. R36I45 is produced in: natural, black, terracotta, fire red, yellow & blue.

APPLICATIONS

- Due to its combination of mechanical properties, ESCR resistance and fluidity, rototech R36I45 is suggested for the production of wide variety of Storage tank applications of water, chemicals & Oils. R36I45 can also be used for off-shore flotation buoys and road crash barriers.

PROPERTIES

Powder Properties			
Typical Properties	Test Method	Unit	Typical Values*
Melt Flow Index (190 °C/2.16 Kg)	ASTM D1238	gm/10 min	4.5
Density (23 °C)	ASTM D1505	gm/cm ³	0.936
ESCR (F-50, 10% Igepal)	ASTM D1693	hr	>350
Vicat Softening Point	ASTM D1525	°C	117

Product Properties*			
Typical Properties	Test Method	Unit	Typical Values*
Tensile Strength at Yield	ASTM D638	Kg/cm ²	180
Elongation at Yield	ASTM D638	%	20
Notched Izod Impact Strength	ASTM D256	Kg.cm/cm	25
Flexural Modulus	ASTM D790	Kg/cm ³	6000
Hardness	ASTM D2240	D	55

*Typical characteristics are not to be taken as specification.

*Test specimen for product properties is 2-3.2 mm thick.

Typical Values refer to the base resin (natural). Median Granulometry is 50 mesh (350 microns) which goals more than 15% economy on process time.

REGULATORY INFORMATION

- rototech R36I45 meets the requirement stipulated in standard **IS:10141:2001** on “Specification for Polyethylene for safe use in contact with foodstuff, pharmaceuticals & Drinking Water”. It also conforms to **IS 12701:1996** –“Specification For Rotational Moulded Polyethylene Water Storage Tanks.”.

STORAGE CONDITIONS

- Bags should be stored in dry/closed conditions at temperature below 50 °C.

CUSTOM GRADES

- Different rotomolding applications can require different grades of material. We produce customize grades by compounding different Materials and by altering the grinding specification as required. For example, if you need a material that is very stiff but also flows well we can produce a high-density grade with a high melt flow and we can also alter the grinding specification to enhance mouldability.