

# TECHNICAL DATA SHEET

## rototech R39I38

### LLDPE (Linear Low-Density Polyethylene) Powder for Rotomoulding

#### DESCRIPTION

- rototech R39I38 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. R39I38 is produced in: natural, black, terracotta, fire red, yellow & blue.

#### APPLICATIONS

- Due to its combination of mechanical properties, ESCR resistance and fluidity, rototech R39I38 is suggested for the production of wide variety of Storage tank applications of water, chemicals & Oils. R39I38 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	3.8
Density (23 °C)	ASTM D1505	gm/cm <sup>3</sup>	0.939
ESCR (F-50, 10% Igepal)	ASTM D1693	hr	>500
Vicat Softening Point	ASTM D1525	°C	118
Product Properties*			
Typical Properties	Test Method	Unit	Typical Values*
Tensile Strength at Yield	ASTM D638	MPa	21
Elongation at Yield	ASTM D638	%	15
Flexural Modulus	ASTM D790	Kg/cm <sup>3</sup>	9000
Hardness	ASTM D2240	D	58

\*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 R39I38 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 Molded Polyethylene Water Storage Tanks.”.

#### STORAGE CONDITIONS

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

#### CUSTOM GRADES

- Different roto molding 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 moldability.