

TECHNICAL DATA SHEET


G-3938

Linear Low Density Polyethylene Powder for Rotational Molding

DESCRIPTION

- GREENETHENE **G-3938** is a Low Density Linear Polyethylene Resin (LLDPE) in powder form, additivated with antioxidants and UV stabilizers. It is suitable for Rotational Molding applications. Items produced by GREENETHENE **G-3938** have a very good balance between mechanical properties and ESCR resistance. **G-3938** produced in: natural, black also upon request in terracotta, fire red, yellow & blue.

APPLICATIONS

- Due to its combination of mechanical properties, ESCR resistance and fluidity, GREENETHENE **G-3938** is suggested for the production of wide variety of tank applications for the storage of water, chemicals & Oils. GREENETHENE **G-3938** 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 ³	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 ³	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

- GREENETHENE **G-3938** 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 rotomoulding 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.

