

TECHNICAL DATA SHEET


G-3804

Linear Low Density Polyethylene Powder for Rotational Molding

DESCRIPTION

- GREENETHENE **G-3804** is a Butene Co-polymer based Linear Low Density Polyethylene Resin (LLDPE) in powder form which is designed for Rotational molding applications, additivated with antioxidants and UV stabilizers. Items produced by GREENETHENE **G-3804** have an excellent stiffness and a very good balance between mechanical properties like impact strength and ESCR resistance. **G-3804** is produced in: natural, black, terracotta, fire red, yellow & blue.

APPLICATIONS

- Due to its combination of mechanical properties, ESCR resistance & fluidity, GREENETHENE **G-3804** is suggested for the production of Toys & playground equipment, storage containers, chemical & Oil tanks.

PROPERTIES

Powder Properties			
Typical Properties	Test Method	Unit	Typical Values*
Melt Flow Index (190 °C/2.16 Kg)	ASTM D1238	gm/10 min	4
Density (23 °C)	ASTM D1505	gm/cm ³	0.938
Melting Point	ASTM D2117	°C	125
Brittleness Temperature	ASTM D746	°C	< -60
Vicat Softening Point	ASTM D1525	°C	120

Product Properties*			
Typical Properties	Test Method	Unit	Typical Values*
Tensile Strength at Yield	ASTM D638	MPa (Kg/cm ²)	20 (200)
Tensile Strength at Break	ASTM D638	Mpa (Kg/cm ²)	18 (180)
Elongation at Break	ASTM D638	%	800
ARM Impact Strength (-40 °C, 5mm Sample)	ARM	J/mm (lb-ft)	19 (70)
Flexural Modulus	ASTM D790	Mpa (Kg/cm ²)	700 (7000)
Hardness	ASTM D2240	Shore D	60

*Typical characteristics are not to be taken as specification.

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

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-3804** 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.

