LDPE

LDPE G03-5

LOW DENSITY POLYETHYLENE (LDPE)

PETILEN G03-5 is a low density polyethylene resin produced by high pressure autoclave process. The product has broad molecular weight distribution and low melt flow rate. Developed for general purpose applications, PETILEN G03-5 contains no additives.

Typical Application	International Compliance
• Blown film extrusion: shrink films, construction and agricultural films, heavy duty bags and sacks • Blow molding: containers and bottles • Pipe extrusion: drip irrigation pipes	• Commission Regulation (EU) No. 10/2011

Film Properties

Properties	Test Method	Typical Value	Unit
Tensile Strength at Yield, MD	ASTM D882	12	MPa
Tensile Strength at Yield, TD	ASTM D882	11	MPa
Tensile Strength at Break, MD	ASTM D882	26	MPa
Tensile Strength at Break, TD	ASTM D882	23	MPa
Elongation at Break, MD	ASTM D882	>250	%
Elongation at Break, TD	ASTM D882	>500	%
Tear Strength, MD	ASTM D1922	240	cN
Tear Strength, TD	ASTM D1922	260	cN
Haze	ASTM D1003	9.3	%
Gloss, 45°	ASTM D2457	58	GU
Vicat Softening Point, 10 N	ASTM D1525	98	°C

Physical Properties

Properties	Test Method	Typical Value	Unit
Melt Flow Rate (190°C/2.16 kg)	ASTM D1238	0.30	g/10 min
Density, 23°C	ASTM D1505	0.920	g/cm³
Melting Point (DSC)	ASTM D3418	110	°C

Processing Guidelines

Film extrusion applications:
Typical zone temperature: 160 – 220°C
Typical melt temperature: 190 – 210°C
Typical blow-up ratio (BUR): 2:1 – 3:1
Due to differences in extrusion, processing conditions should be optimized for each extruder design.

1. These are typical properties only and are not to be construed as specifications. Customers should confirm results by their own tests.
2. Film properties are measured on 50 µm blown film, Blow up ratio (BUR) 3:1, melt temperature ~205°C. MD: Machine Direction, TD: Transverse Direction.