

rLDPE black

Sustainable low-density polyethylene resin

Product description

Low density polyethylene resin reprocessed from post-consumer & post-industrial films. The material is shredded and washed through a wash plant before it is processed through degassing and very fine filtration to produce high purity reprocessed resin.

r-LDPE black is a blown film grade and exhibits excellent processability and good balance of toughness, strength and stretch properties. This grade is also suitable for profile and sheet extrusion.

Colour

Black

Packaging

1000kg bulk bag

Properties ¹	Typical values	Variance	Units	Test methods
Polymer properties				
Melt flow rate (190°C / 2.16kg)	1.0	± 0.2	g 10 mins ⁻¹	EN ISO 1133
Density	0.92	± 0.015	g cm ⁻³	EN ISO 1183-1
Filtration	110		µm	
Moisture content	< 1		weight %	weight loss at 105°C
Typical film properties²				
Dart impact strength	70	± 10	G	BS EN ISO 7765-1
Tear strength TD Elmendorf	3550	± 50	mN	BS EN ISO 6383-2
Tear strength MD Elmendorf	1500	± 50	mN	
Tensile strength TD	14	± 3	MPa	BS EN ISO 527
Tensile strength MD	18	± 3	MPa	
Tensile elongation at break TD	500	± 50	%	
Tensile elongation at break MD	300	± 50	%	

¹Please note that the property details shown in the above table are typical for the material type and obtained by averaging lab data from several samples taken during production. Users should confirm results by their own testing.

²Measured on blown film of 25 µm and BUR of 2.5 at external testing facility.

Processing

rLDPE black is typically extruded at a melt temperature around 190°C (min 180°C, max 240°C).