



Sasol Polymers LDPE: LT159

Features

- Tubular resin
- Good flexibility

Density: 0.922 g/cm³

Applications

- Blow moulded bottles and tubes
- Pool hoses
- Extruded profiles
- Foamed polyethylene sheeting and profiles

MFI: 0.75 g/10min

Additives

- Antioxidant

Material properties (typical values not to be construed as specifications)

	Value	Unit	Test method	Based on
MFI (190°C/2.16kg)	0.75	g/10min	PTM 058	ASTM D1238
Nominal density	0.922	g/cm ³	PTM 002	ASTM D1505
Tensile strength at yield	12	MPa	PTM 006	ASTM D638 ¹⁾
Tensile strength at break	15	MPa	PTM 006	ASTM D638 ¹⁾
Elongation at break	458	%	PTM 006	ASTM D638 ¹⁾
Flexural Modulus	343	MPa	PTM 008	ASTM D790
ESCR F ₅₀	2.3	hr	PTM 001	ASTM D1693 ²⁾
Shore D hardness	53	ShoreD	PTM 079	ASTM D2240
Vicat softening temperature	98	°C	PTM 080	ASTM D1525

¹⁾ 500mm/min jaw separation

²⁾ 100% Igepal C0630



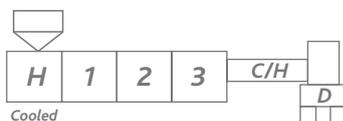


Typical processing conditions

Blow Moulding



LT159 can be processed on all standard extrusion blow moulding equipment. Processing temperatures need to be optimised with any equipment, but the melt temperature should be typically 150°C - 180°C.



Packaging

Sasol Polymers polyolefin resins are supplied in pellet form packed in 25kg bags. Alternative packaging modes for polypropylene resins are available for selected grades.

Handling

Workers should be protected from the possibility of skin or eye contact with molten polymer. Safety glasses and heat resistant gloves are suggested as a minimal precaution to prevent possible mechanical or thermal injuries to the eyes and skin. Fabrication areas should be ventilated to carry away fumes or vapours.

Conveying equipment should be designed to prevent accumulation of fines or dust particles that are contained in all polyolefin resins. These fines and dust particles can, under certain conditions, pose an explosion hazard. Sasol Polymers recommend the conveying system used:

- be equipped with adequate filters
- is operated and maintained in such a manner to ensure no leaks develop
- that adequate grounding exists at all times

Sasol Polymers further recommend that good housekeeping be practised throughout the manufacturing facility. Polymer pellets may pose a slippage hazard if spilled.

Storage

As ultraviolet light may cause a change in the material properties, all polyolefin resins should be protected from direct sunlight during storage. Under cool, dry, dark conditions Sasol Polymers polyolefin resins are expected to maintain their original material and processing properties for at least 18 months.

