

# PETLIN LD N103X

## Low Density Polyethylene

### PETLIN (MALAYSIA) SDN BHD



Prospector

#### Product Description

PETLIN LD N103X is a low density polyethylene resin for heavy duty film applications. It is produced by the state-of-the-art DSM Stamicarbon tubular process. It contains antioxidant (BHT free) additives. It is intended primarily for blown film process.

#### General

Material Status	• Commercial: Active		
Availability	• Asia Pacific		
Additive	• Antioxidant		
Features	• Antioxidant • Food Contact Acceptable	• High Strength • Low Gel	• Low Shrinkage
Uses	• Construction Applications • Film	• Heavy-duty Bags • Liners	
Agency Ratings	• FDA 21 CFR 177.1520		
Forms	• Pellets		
Processing Method	• Blown Film	• Film Extrusion	

Physical	Nominal Value Unit	Test Method
Density	0.921 g/cm <sup>3</sup>	ISO 1183/A
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	0.30 g/10 min	ISO 1133

Mechanical	Nominal Value Unit	Test Method
Coefficient of Friction	0.70	ASTM D1894

Films	Nominal Value Unit	Test Method
Film Thickness - Tested	45 µm	
Film Thickness - Recommended / Available	45 to 280 µm	
Tensile Modulus		ISO 527-3
MD: 45 µm	245 MPa	
TD: 45 µm	260 MPa	
Tensile Stress		ISO 527-3
MD: Break, 45 µm	30.0 MPa	
TD: Break, 45 µm	27.0 MPa	
Tensile Elongation		ISO 527-3
MD: Break, 45 µm	170 %	
TD: Break, 45 µm	550 %	
Dart Drop Impact (45 µm)	270 g	ASTM D1709
Elmendorf Tear Strength		ISO 6383-2
MD: 45 µm	20000 N	
TD: 45 µm	25000 N	

Optical	Nominal Value Unit	Test Method
Gloss (45°, 45.0 µm)	43	ASTM D2457
Haze (45.0 µm)	14 %	ASTM D1003

Extrusion	Nominal Value Unit
Melt Temperature	170 to 190 °C

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.