



# DOW™ LDPE PT 7007

## Low Density Polyethylene Resin

### Overview

DOW LDPE PT 7007 Polyethylene Resin is a low density polyethylene suitable designed for extrusion coating applications. DOW LDPE PT 7007 Polyethylene Resin has been designed to offer minimum volatile organic carbon (VOC) levels for use in extrusion coating, contributing to low factory emissions and optimal sensory performance.

DOW LDPE PT 7007 Polyethylene Resin exhibits:

- Excellent draw down.
- Good edge stability.
- Low neck-in.

Note: DOW LDPE PT 7007 Polyethylene Resin should comply with U.S. FDA CFR 177.1520(c)2.2 and with EU, No 10/2011 when used unmodified and processed according to good manufacturing practices for food contact applications. Please contact your nearest office regarding food contact compliance statements. The purchaser remains responsible for determining whether the use complies with all relevant regulations.

Applications:

- Paper.
- Board and foil coatings for packaging.
- Food and non-food.

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.918 g/cm <sup>3</sup>	0.918 g/cm <sup>3</sup>	ASTM D792
Melt Index (190°C/2.16 kg)	7.5 g/10 min	7.5 g/10 min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress			ISO 527-2
Yield	1160 psi	8.00 MPa	
Break	1450 psi	10.0 MPa	
Tensile Strain (Break)	400 %	400 %	ISO 527-2
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Seal Initiation Temperature <sup>1</sup>	221 °F	105 °C	Dow Method
Water Vapor Transmission <sup>2</sup>	17 g/100 in <sup>2</sup> /24 hr	260 g/m <sup>2</sup> /24 hr	ASTM E398-83
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	192 °F	89.0 °C	ISO 306/A
Extrusion	Nominal Value (English)	Nominal Value (SI)	Test Method
Melt Temperature	518 to 635 °F	270 to 335 °C	
Minimum Coating Weight <sup>3</sup>	3.1 lb/ream	5.0 g/m <sup>2</sup>	Dow Method
Neck-in			Dow Method
-- <sup>4</sup>	2.6 in	65.0 mm	
-- <sup>5</sup>	2.8 in	70.0 mm	
-- <sup>6</sup>	3.0 in	75.0 mm	

## Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

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<sup>1</sup> Temperature required to reach 3 N/15 mm for a 25 g/m<sup>2</sup> coating of LDPE PT 7007 Polyethylene Resin onto paper.

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<sup>2</sup> 23°C, 90% RH

Divide by coating weight in g/m<sup>2</sup> to obtain actual WVTR, e.g. at 20 g/m<sup>2</sup> LDPE PT 7007 Polyethylene Resin the WVTR is 378/20= 18.9 g/m<sup>2</sup> day

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<sup>3</sup> At 320°C set temperature.

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<sup>4</sup> 100 m/min, 25 g/m<sup>2</sup> coatings at 290°C set temperature.

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<sup>5</sup> 200 m/min, 25 g/m<sup>2</sup> coatings at 290°C set temperature.

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<sup>6</sup> 300 m/min, 25 g/m<sup>2</sup> coatings at 290°C set temperature.

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