



Technical Data Sheet

DOW™ LDPE PG 7008 REN Low Density Polyethylene Resin

Description

DOW™ LDPE PG 7008 REN Low Density Polyethylene Resin is typically used in extrusion coating applications. DOW™ LDPE PG 7008 REN Low Density Polyethylene Resin can be readily processed using conventional LDPE extrusion coating hardware of melt temperatures of 270 to 335°C, preferably less than 290°C, for best sensory performance. DOW™ LDPE PG 7008 REN Low Density Polyethylene Resin provides low volatile organic carbon (VOC) emissions in extrusion, contributing to low factory emissions and optimal sensory performance. When processed on suitable hardware, DOW™ LDPE PG 7008 REN Low Density Polyethylene Resin exhibits excellent draw down, good edge stability and low neck-in.

Sustainability Attribute:



Applications

- Paper, board and foil coatings for packaging, food and non-food

Complies with

- EU, No 10/2011
- U.S. FDA 21 CFR 177.1520(c)2.2
- U.S. FDA-DMF
- Canadian HPFB No Objection (with limitations)
- ISCC PLUS certification for bio-circular plastics

Consult the regulations for complete details.

Properties¹

Physical	Nominal Value	Unit	Test Method ²
Density	0.918	g/cm ³	ASTM D792
Melt Index (190°C/2.16kg)	7.7	g/cm ³	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus – 2% Secant	160	MPa	ASTM D638
Tensile Strength			ASTM D638
Yield	8.00	MPa	
Break	10.0	MPa	
Tensile Elongation (Break)	450	%	ASTM D882

- Typical properties: these are not to be construed as specifications. Users should confirm results by their own tests.
- ASTM: American Society for Testing and Materials
ISO: International Standardization Organization



Properties (Cont.)

Films	Nominal Value	Unit	Test Method
Seal Initiation Temperature ³	105	°C	Internal Method
Water Vapor Transmission ⁴	270	g/m ² /24 hr	ASTM E398-83
Minimum Heat Seal Temperature	100 to 120	°C	Internal Method
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	89.0	°C	ISO 306/A
Melting Temperature	106	°C	DSC
Extrusion	Nominal Value	Unit	Test Method
Melt Temperature	270 to 335	°C	
Minimum Coating Weight ⁵	5.0	g/cm ²	Internal Method
Neck-in ⁶	65.00	mm	Internal Method

3. Temperature required to reach 3 N/15mm for a 25 g/m² coating of PG 7008 REN onto paper.
4. 38°C, 90% RH
Divide by coating weight in g/m² to obtain actual WVTR
5. 290°C set temperature
6. 100 m/min, 25 g/m² coatings at 290°C set temperature

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Medical Applications Policy

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- b. use in cardiac prosthetic devices regardless of the length of time involved ("cardiac prosthetic devices" include, but are not limited to, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems, and ventricular bypass-assisted devices);
- c. use as a critical component in medical devices that support or sustain human life;
- d. use specifically by pregnant women or in applications designed specifically to promote or interfere with human reproduction; or
- e. use as an ingredient of a pharmaceutical injectable application.



Medical Applications Policy (Cont.)

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