



DOW™ LDPE 959S

The Dow Chemical Company - Low Density Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

- Low Density Polyethylene (LDPE)
- Typical applications include lids
- Excellent clarity, flexibility, low warpage
- Complies with U.S. FDA 21 CFR 177.1520 (c) 2.1.
- Complies with Canadian HPFB No Objection (With Limitations)
- Consult the regulations for complete details.

DOW Polyethylene 959S Low Density Resin is a medium molecular weight distribution homopolymer. This resin has good processability over a wide range of molding conditions.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Latin America	• North America
Additive	• Antiblock: No	• Processing Aid: No	• Slip: No
Agency Ratings	• FDA 21 CFR 177.1520(c) 2.1	• HPFB (Canada) No Objection ¹	
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties²

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.925		ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	55	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR) 122°F, 100% Igepal, F50	< 1.00	hr	ASTM D1693
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	1600	psi	ASTM D638
Tensile Strength (Break)	900	psi	ASTM D638
Tensile Elongation (Yield)	3.0	%	ASTM D638
Tensile Elongation (Break)	58	%	ASTM D638
Flexural Modulus - 2% Secant	48000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Tensile Impact Strength ³	56.0	ft-lb/in ²	ASTM D1822
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	48		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	115	°F	ASTM D648
Brittleness Temperature	-4.00	°F	ASTM D746
Vicat Softening Temperature	194	°F	ASTM D1525
Melting Temperature (DSC)	230	°F	Internal Method
Peak Crystallization Temperature (DSC)	212	°F	Internal Method

Additional Information

Plaque molded and tested in accordance with ASTM D4976.

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Notes

¹ With limitations

² Typical properties: these are not to be construed as specifications.

³ Type S