

# 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 <sup>1</sup>	
Forms	• Pellets		
Processing Method	Injection Molding		

ASTM & ISO Properties <sup>2</sup>				
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)			ASTM D1693	
122°F, 100% Igepal, F50	< 1.00	hr		
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 <sup>3</sup>	56.0	ft·lb/in²	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

<sup>1</sup> With limitations

 $^{\rm 2}$  Typical properties: these are not to be construed as specifications.

3 Type 9

