



DOWLEX™ 2553

Linear Low Density Polyethylene Resin

Overview

DOWLEX 2553 resin is a narrow molecular weight distribution copolymer designed to offer good ESCR and impact strength, with excellent stiffness for housewares, containers and large toys. DOWLEX 2553 resin has good processability over a wide range of molding conditions.

- For housewares, containers and large toys
- Excellent stiffness, good impact strength

Complies with:

- U.S. FDA 21 CFR 177.1520 (c) 3.2a
- Canadian HPFB
- DMF

Consult the regulations for complete details.

Additive

- Antiblock: No
- Slip: No
- Processing Aid: No

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.935 g/cm ³	0.935 g/cm ³	ASTM D792
Base Density ¹	0.935 g/cm ³	0.935 g/cm ³	Dow Method
Melt Index (190°C/2.16 kg)	40 g/10 min	40 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus - 2% Secant (0.125 in (3.18 mm))	49800 psi	344 MPa	ASTM D638
Tensile Strength ²			ASTM D638
Yield, 0.125 in (3.18 mm)	1800 psi	12.4 MPa	
Break, 0.125 in (3.18 mm)	1420 psi	9.79 MPa	
Tensile Elongation ²			ASTM D638
Break, 0.125 in (3.18 mm)	800 %	800 %	
Flexural Modulus (0.125 in (3.18 mm))	95600 psi	659 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
-58°F (-50°C), 0.125 in (3.18 mm)	1.1 ft-lb/in	59 J/m	
73°F (23°C), 0.125 in (3.18 mm)	1.5 ft-lb/in	80 J/m	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	207 °F	97.2 °C	ASTM D1525
Melting Temperature	257 °F	125 °C	DSC

Notes

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

¹ Base density is estimated using the assumption that every 1000 ppm of antiblock in the finished product raises the density of the polymer by 0.0006 g/cm³. Base density is the estimated density of the polymer if it did not contain any antiblock.

² 2.0 in/min (51 mm/min)

