



Technical Data Sheet

DOWLEX™ 2517 Polyethylene Resin

Overview

DOWLEX™ 2517 Polyethylene Resin is a narrow molecular weight distribution copolymer designed to offer good ESCR and low temperature properties with excellent flexibility. This resin has good processability over a wide range of molding conditions.

- Linear low-density polyethylene
- For lids, housewares and containers
- Excellent low-temperature flexibility, good ESCR

Complies with:

- U.S. FDA FCN 424
- Canadian HPFB No Objection (With Limitations)
- EU, No 10/2011
- U.S. FDA-DMF
- U.S. USP 23

Consult the regulations for complete details.

Additive

- Antiblock: No
- Slip: No
- Processing aid: No

Typical Properties

Physical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test
Density	0.917	g/cm ³	0.917	g/cm ³	ASTM D792
Base Density ¹	0.917	g/cm ³	0.917	g/cm ³	Dow Method
Melt Index (190°C/2.16 kg)	25	g/10 min	25	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR) 122°F (50°C), 100% Igepal, F50	4.00	hr	4.00	hr	ASTM D1693
Mechanical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test
Tensile Strength					ASTM D638
Yield	1400	psi	9.65	MPa	
Break	1300	psi	8.96	MPa	
Tensile Strength					ASTM D638
Yield	3.0	%	3.0	%	
Break	600	%	600	%	

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.



Typical Properties (Cont.)

Mechanical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test
Flexural Modulus — 2% Secant	34000	psi	234	MPa	ASTM D790B
Impact	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test
Tensile Impact Strength ²	190	ft-lb/in ²	399	kJ/m ²	ASTM D1822
Hardness	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test
Durometer Hardness (Shore D)	45		45		ASTM D2240
Thermal	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed	103	°F	39.4	°C	ASTM D648
Brittleness Temperature	< -105	°F	< -76.1	°C	ASTM D746
Vicat Softening Temperature	197	°F	91.7	°C	ASTM D1525
Melting Temperature (DSC)	255	°F	124	°C	Dow Method
Peak Crystallization Temperature (DSC)	218	°F	103	°C	Dow Method
Additional Information					
Plaque molded and tested in accordance with ASTM D4976.					

