



DOWLEX™ 2517

The Dow Chemical Company - Polyethylene Resin

Wednesday, January 29, 2020

General Information

Product Description

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.

General

| | | | |
|-----------------------|---|--|------------|
| Material Status | • Commercial: Active | | |
| Regional Availability | • Asia Pacific | • North America | |
| Additive | • Antiblock: No | • Processing Aid: No | • Slip: No |
| Agency Ratings | • DMF Unspecified Rating • EU No 10/2011 | • FDA FCN 424 • HPFB (Canada) No Objection ¹ | • USP 23 |
| Forms | • Pellets | | |
| Processing Method | • Injection Molding | | |

ASTM & ISO Properties²

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|---|---------------------------|-----------------------|-------------|
| Density / Specific Gravity | 0.919 | 0.919 | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) | 25 g/10 min | 25 g/10 min | ASTM D1238 |
| Environmental Stress-Cracking Resistance (ESCR) | | | ASTM D1693 |
| 122°F (50°C), 100% Igepal, F50 | 4.00 hr | 4.00 hr | |
| Mechanical | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Strength | | | ASTM D638 |
| Yield | 1400 psi | 9.65 MPa | |
| Break | 1300 psi | 8.96 MPa | |
| Tensile Elongation | | | ASTM D638 |
| Yield | 3.0 % | 3.0 % | |
| Break | 600 % | 600 % | |
| Flexural Modulus - 2% Secant | 34000 psi | 234 MPa | ASTM D790B |
| Impact | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Impact Strength ³ | 190 ft·lb/in ² | 399 kJ/m ² | ASTM D1822 |

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| Hardness | Typical Value (English) | Typical Value (SI) | Test Method |
|--|-------------------------|--------------------|-----------------|
| Durometer Hardness (Shore D) | 45 | 45 | ASTM D2240 |
| Thermal | Typical Value (English) | Typical Value (SI) | Test Method |
| 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 | Internal Method |
| Peak Crystallization Temperature (DSC) | 218 °F | 103 °C | Internal Method |

Additional Information

Plaque molded and tested in accordance with ASTM D4976.

Notes

¹ With limitations

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

³ Type S