



DOW™ LLDPE DNDA-1081 NT 7

Linear Low Density Polyethylene Resin

Overview

- Injection molding
- Lids
- Excellent processability with good low temperature impact strength and rigidity
- Very narrow molecular weight distribution
- Complies with U.S. FDA 21 CFR 177.1520 (c)3.1a
- Complies with FDA-DMF
- Complies with EU, No 10/2011
- Complies with CANADIAN HPFB NO OBJECTION (WITH LIMITATIONS)
- Consult the regulations for complete details.

DOW DNDA-1081 NT 7 Linear Low Density Polyethylene (LLDPE) Resin is produced using UNIPOL™ PE Process Technology and is intended for highspeed injection molding of thin-walled parts such as downgauged lids. This resin has been designed to have an excellent balance of processability, impact strength, and rigidity.

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|--|----------------------------|-------------------------|-------------|
| Density | 0.931 g/cm ³ | 0.931 g/cm ³ | ASTM D792 |
| Melt Index (190°C/2.16 kg) | 130 g/10 min | 130 g/10 min | ASTM D1238 |
| Mechanical | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Tensile Strength | | | ASTM D638 |
| Yield | 1600 psi | 11.0 MPa | |
| Break | 1300 psi | 8.96 MPa | |
| Tensile Elongation | | | ASTM D638 |
| Yield | 2.0 % | 2.0 % | |
| Break | 60 % | 60 % | |
| Flexural Modulus - 2% Secant | 76000 psi | 524 MPa | ASTM D790B |
| Impact | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Tensile Impact Strength ¹ | 50.0 ft-lb/in ² | 105 kJ/m ² | ASTM D1822 |
| Hardness | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Durometer Hardness (Shore D) | 55 | 55 | ASTM D2240 |
| Thermal | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Deflection Temperature Under Load | | | ASTM D648 |
| 66 psi (0.45 MPa), Unannealed | 124 °F | 51.1 °C | |
| Brittleness Temperature | -11.0 °F | -23.9 °C | ASTM D746 |
| Vicat Softening Temperature | 207 °F | 97.2 °C | ASTM D1525 |
| Melting Temperature (DSC) | 259 °F | 126 °C | Dow Method |
| Peak Crystallization Temperature (DSC) | 235 °F | 113 °C | Dow Method |

Additional Information

Plaque molded and tested in accordance with ASTM D4976.

Notes

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

¹ Type S

