

Technical Data Sheet

DOW™ LDPE 219M Low Density Polyethylene Resin

Complies with

USP 661.1

Consult the regulations for complete details.

Typical Properties

Typical properties: These are not to be construed as specifications. Users should confirm results by their own tests.

| Physical | Nominal Value | Unit (English) | Nominal Value | Unit (SI) | Test Method |
|--|---------------|-------------------|---------------|-------------------|-----------------|
| Base Density | 0.921 | g/cm ³ | 0.921 | g/cm ³ | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) | 2.0 | g/10 min | 2.0 | g/10 min | ASTM D1238 |
| Mechanical | Nominal Value | Unit (English) | Nominal Value | Unit (SI) | Test Method |
| Coefficient of Friction | | | | | ASTM D1894 |
| vs. Itself — Dynamic | 0.55 | | 0.55 | | |
| vs. Itself — Static | 0.71 | | 0.71 | | |
| Film | Nominal Value | Unit (English) | Nominal Value | Unit (SI) | Test Method |
| Film Thickness — Tested | 2.0 | mil | 50 | μm | |
| Film Puncture Resistance (2.0 mil (50 µm)) | 48.3 | in•lb | 40.0 | J/cm ³ | Internal Method |
| Tensile Strength | | | | | ASTM D882 |
| MD: Yield, 2.0 mil (50 μm) | 1600 | psi | 11.0 | MPa | |
| TD: Yield, 2.0 mil (50 µm) | 1740 | psi | 12.0 | MPa | |
| MD: Break, 2.0 mil (50 µm) | 3340 | psi | 23.0 | MPa | |
| TD: Break, 2.0 mil (50 µm) | 2760 | psi | 19.0 | MPa | |
| Tensile Elongation | | | | | ASTM D882 |
| MD: Break, 2.0 mil (50 µm) | 600 | % | 600 | % | |
| TD: Break, 2.0 mil (50 µm) | 830 | % | 830 | % | |
| Dart Drop Impact, 2.0 mil (50 µm) | 96 | g | 96 | g | ASTM D1709A |
| Optical | Nominal Value | Unit (English) | Nominal Value | Unit (SI) | Test Method |
| Gloss (45°C, 1.97mil (50 μm)) | 62 | | 62 | | ASTM D2457 |
| Haze (1.97mil (50 µm)) | 8.00 | % | 8.00 | % | ASTM D1003 |
| Extrusion | Nominal Value | Unit (English) | Nominal Value | Unit (SI) | Test Method |
| Melt Temperature | 379 | °F | 193 | °C | |
| Notes: | | | | | |

Notes:

ASTM: American Society for Testing and Materials

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