Technical Information

DOWLEX™ 2740G (Tape)
Polyethylene Resin

Overview

DOWLEX™ 2740G Polyethylene Resin is a high performance linear low density polyethylene suitable for the production of tapes and monofilaments used in woven or knitted fabrics. Tapes and monofilaments made from this resin exhibit an excellent tenacity at the required elongation at break values. DOWLEX 2740G Polyethylene Resin can be extruded via the blowing or casting method and tapes can be manufactured using the tape or film stretching process.

Applications:
- Tapes and Monofilaments

Complies with:
- EU, No 10/2011
- U.S. FDA 21 CFR 177.1520(c)3.2a

Consult the regulations for complete details.

Additive

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

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density [1]	0.940	g/cm³	0.940	g/cm³	ASTM D792
Melt Index [1] (190°C/2.16 kg)	1.0	g/10 min	1.0	g/10 min	ISO 1133
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Vicat Softening Temperature [1]	208	°F	97.8	°C	ASTM D1525

Additional Information

100 Tex Tapes (Cast Film):
- Tape Stretching Ratio
  - Tenacity: 5 to 6 cN/dtex
  - Elongation: 28 to 32%

Film Stretching Process (Blown Film):
- 22 µm Film
  - Tenacity: 3.2 cN/dtex
  - Elongation: 55%
- 28 µm Film
  - Tenacity: 3.4 cN/dtex
  - Elongation: 56%

360 dtex Monofilaments:
- Tenacity: 6.7 cN/dtex
- Elongation: 33%
- Shrinkage (100°C): 3.8%

Extrusion Notes

Melt Temperature:
- Blown Film Lines: 200 to 230°C
- Cast Film Lines: 240 to 270°C

Stretching Ratio:
- Film Stretching Process: 7 to 7.5:1
- Tape Stretching Process: 6 to 8:1
- Monofilaments: 8 to 9:1

Notes

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

[1] Compression Molded