Technical Information

DOWLEX™ 2064G
Linear Low Density Polyethylene Resin

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Overview

DOWLEX™ 2064G Polyethyelene Resin is cast extrusion linear low density polyethylene resin grade suitable for artificial turf yarns including slit tapes and monofilaments.

Main Characteristics:
- Linear Low Density Polyethylene
- Improved thermal stability for artificial turf yarns, high stiffness monofilament and tape.

Complies with:
- U.S. FDA 21 CRF 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	0.935	g/cm³	0.935	g/cm³	ASTM D792
Base Density [1]	0.935	g/cm³	0.935	g/cm³	Dow Method
Melt Index (190°C/2.16 kg)	2.5	g/10 min	2.5	g/10 min	ASTM D1238
Films	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Film Puncture Resistance	125	ft·lb/in³	10.3	J/cm³	Dow Method
Film Toughness					ASTM D882
MD	3910	ft·lb/in³	324	J/cm³	
TD	3720	ft·lb/in³	308	J/cm³	
Tensile Strength					ASTM D882
MD : Yield	2450	psi	16.9	MPa	
TD : Yield	2550	psi	17.6	MPa	
MD : Break	8590	psi	59.2	MPa	
TD : Break	5790	psi	39.9	MPa	
Tensile Elongation					ASTM D882
MD : Break	620	%	620	%	
TD : Break	750	%	750	%	
Dart Drop Impact	57	g	57	g	ASTM D1709A
Elmendorf Tear Strength [2]					ASTM D1922
MD	83	g	83	g	
TD	290	g	290	g	
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Vicat Softening Temperature	246	°F	119	°C	ASTM D1525
Melting Temperature (DSC)	257	°F	125	°C	Dow Method
Optical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Gloss (45°)	90		90		ASTM D2457
Haze	2.60	%	2.60	%	ASTM D1003

Extrusion	Nominal Value	(English)	Nominal Value	(SI)
Melt Temperature	525	°F	274	°C

Extrusion Notes

Fabrication Conditions For Cast Film:
- EGAN/Davis-Standard 5 layer cast line
- Melt Temperature: 525°F (274°C)
- Chill Roll (primary/secondary) Temperature: 70°F (21°C)
- Line Speed: 600 fpm (183m/min)
- Die Width: 24in. (520mm)
- Die Gap: 25mil (0.6mm)

Notes

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

[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.

[2] Method B