

Nylene® CP81311

TECHNICAL DATASHEET

TDS Ref # 947 Reviewed: 7/3/2017

DESCRIPTION

- Has a lower melt point and is less crystalline than standard nylon 6 resins.
- In addition to excellent toughness, chemical resistance, transparency, and low oxygen permeability, films exhibit superior deep-drawing characteristics.
- Nylene CP81311 is a high RV nylon copolymer suitable for both blown and cast film co-extrusion.
- Because Nylene CP81311 is polymerized using a continuous process, it has good lot-to-lot consistency.
- Excellent toughness, chemical resistance, transparency, and low oxygen permeability
- Films made using Nylene CP81311 exhibit superior deep draw characteristics

PROPERTIES	TEST METHOD	UNIT	VALUE
PHYSICAL PROPERTIES			
Moisture	D648	%	<0.1
Oxygen Permeably	D3985	See Note#2	3.8*
Specific Gravity	D792	n/a	1.11
THERMAL PROPERTIES			
Melt Point	D3418	°F (°C)	385 (195)
FILM PROPERTIES			
Break Stress	D882	psi (MPa)	84410 (58)
Maximum Strain	D882	%	350
Tensile Yield Strength	D882	psi (MPa)	3845 (26.5)
Ultimate Tensile Strength	D882	psi (MPa)	8645 (60)
Yield Stress	D882	psi (MPa)	3915 (27)
Young's Modulus	D882	psi (MPa)	48575 (335)

NOTES

- Oxygen permeability measured using 1 mil. monofilm.
- cc-mil/100 sq. in.-24 hr.-atm. @ 24 C (75 F).
- For comparison, values for nylon 6 monofilm of one mil was measured at 3.1 cc-mil/100 sq. in.-24 hr.-atm.
- Nylene® CP81311 can be processed effectively with extruder barrel and die temperatures set to give melt temperatures in the range of 225 C - 260 C (437 F - 500 F).

CHARACTERISTICS

Resin Type: Nylon 6/69
Product Characteristics:
High RV

EXTRUSION PROCESSING

Film

FEATURES

- Excellent elongation
- Good shrink
- Low residual monomer

MARKETS USED

- Packaging Industry
- Food Packaging

APPLICATIONS

- Blown Film
- Cast Film (anti-static)
- Deep Draw
- Gel Free

DISCLAIMER

The data set forth herein has been carefully compiled by Nylene in our laboratories. Values shown are typical properties and not specifications. Since processing variables will affect properties, the reproducibility of our data in a customer's testing facility is not guaranteed. There is no warranty of any kind, either expressed or implied, applicable to the use of this information, and the user assumes all risk and liability in connection therewith.



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