

General Information

Product Description

Nylene 609 is a high viscosity, extrusion resin recommended for practically all types of extrusion including profile, film, and extrusion coating. It is especially recommended for flexible packaging where as a film or coating it is used for the outside layer in multi-ply film constructions. Nylene 609 has excellent melt flow and melt strength properties. Optimum processing conditions should permit for a melt temperature of 550 - 575°F at the die.

General

Material Status	• Commercial: Active
Availability	• North America
Test Standards Available	• ASTM
Features	<ul style="list-style-type: none"> • Abrasion Resistance, Good • Impact Resistance, Good • Melt Stability, High • Melt Strength, Good • Strength, High • Viscosity, High
Uses	<ul style="list-style-type: none"> • Piping • Profiles
Agency Ratings	• FDA Food Contact, Unspecified Rating
Forms	• Pellets
Processing Method	<ul style="list-style-type: none"> • Extrusion • Extrusion Coating • Extrusion, Film • Injection Molding

ASTM and ISO Properties ¹

Physical	Nominal Value Unit	Test Method
Density -Specific Gravity	1.12 sp gr 23/23°C	ASTM D792
Water Absorption @ 24 hrs	1.7 %	ASTM D570
Mechanical	Nominal Value Unit	Test Method
Tensile Strength @ Break (73 °F) ²	10200 psi	ASTM D638
Tensile Elongation @ Brk (73 °F) ²	140 %	ASTM D638
Flexural Modulus (73 °F)	260000 psi	ASTM D790
Flexural Strength @ Yield (73 °F)	17000 psi	ASTM D790
Impact	Nominal Value Unit	Test Method
Notched Izod Impact (73 °F)	1.00 ft-lb/in	ASTM D256
Thermal	Nominal Value Unit	Test Method
DTUL @66psi - Unannealed	321 °F	ASTM D648
DTUL @264psi - Unannealed	144 °F	ASTM D648
Melting Point	430 °F	
CLTE, Flow	0.000046 in/in/°F	ASTM D696
Thermal Conductivity	1.3 Btu-in/hr/ft ² /°F	ASTM C177
Electrical	Nominal Value Unit	Test Method
Volume Resistivity	8.0E+13 ohm-cm	ASTM D257
Dielectric Strength	440 V/mil	ASTM D149
Dielectric Constant		ASTM D150
(60 Hz)	4.200	
(1000 Hz)	4.000	
(1E+6 Hz)	3.200	

Dissipation Factor		ASTM D150
(60 Hz)	0.040	
(1000 Hz)	0.040	
(1E+6 Hz)	0.020	

Additional Properties
Relative Viscosity, ASTM D789: 200

Processing Information

Extrusion	Nominal Value	Unit
Die Temperature	550 to 575	°F

Notes

¹ Typical properties: these are not to be construed as specifications.

² 2.0 in/min

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