Nylene® 615SA

Polymeric Resources Corporation (PRC) - *Polyamide 6*

General Information

Product Description

- High viscosity nylon 6 designed for the extrusion of blown film (both mono-layer and multi-layer film structures).
- Suitable for profile extrusion such as tubing, shapes, etc.
- Nylene 615SA has superior grease resistance, toughness, resistance to abrasion, and does not absorb food odors.
- Nylene films can be drawn to provide pockets for many food shapes.
- Good oxygen and flavor barrier to increase shelf life
- Offers chemical and heat resistance for hot filling wide range of food and chemicals

General			
Material Status	• Commercial: Active		
Availability	• North America		
Features	• Abrasion Resistant • Chemical Resistant • Food Contact Acceptable	• Good Heat Resistance • Good Toughness • Grease Resistant	• High Viscosity • Kosher Approved • Low Odor Transfer
Uses	• Beverage Packaging • Containers • Film	• Flexible Packaging • Food Packaging • Liners	• Multilayer Film • Paper Coatings
Agency Ratings	• FDA 21 CFR 177.1500		
Forms	• Pellets		
Processing Method	• Blown Film	• Extrusion	• Film Extrusion

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.13		ASTM D792
Water Absorption (Equilibrium)	1.9	%	ASTM D570
Relative Viscosity [2]	140		ASTM D789
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength	11000	psi	ASTM D638
Tensile Elongation (Break)	200	%	ASTM D638
Flexural Modulus	400000	psi	ASTM D790
Ultimate Tensile Strength - TD	8702	psi	ASTM D882
Films	**Nominal Value**	**Unit**	**Test Method**
Secant Modulus - TD	94600	psi	ASTM D882
Tensile Elongation - TD (Break)	290	%	ASTM D882
Elmendorf Tear Strength - TD	56	g	ASTM D1922
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F)	0.80	ft·lb/in	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Peak Melting Temperature	428	°F	ASTM D3418

Processing Information

Extrusion	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Regrind	25	%
Cylinder Zone 1 Temp.	421 to 444	°F
Cylinder Zone 3 Temp.	435 to 466	°F
Cylinder Zone 5 Temp.	444 to 475	°F
Melt Temperature	455 to 489	°F
Die Temperature	444 to 475	°F

Notes
[1] Typical properties: these are not to be construed as specifications.
[2] Formic Acid