

## Nylon 12 (Semi-crystalline and Amorphous)

Grilamid® TR55, TR55 LX and L25 NZ ESD, Vestamid® L2140 and Rilsan® AESNO

The nylon 12 family offers the lowest water absorption at approximately 2% at saturation, translating into good dimensional stability and electrical properties. Tougher than nylon 11, this family offers comparatively low density as well as good chemical and stress crack resistance. Tubing can be colored in transparent and opaque colors. Amorphous grades offer more translucence. Very flexible grades also are available. FDA and BGA approved for direct contact with food.

### Summary of Properties

Property	Test Method ISO (ASTMD)	Units	Grilamid® TR55	Grilamid® TR55 LX	Grilamid® L25 NZ ESD	Vestamid® L2140	Rilsan® AESNO
Tensile Strength at Yield	ISO 527 (D 638)	Mpa	75	70	35	47	(48)
Tensile Strength at Break	ISO 527 (D 638)	Mpa	50	40	40	-	(48)
Elongation at Break	ISO 527 (D 638)	%	>50	>50	>50	>50	(330)
Notched Impact Strength - Charpy	ISO 179/2	KJ/M²	8	9	80	16	(140 J/M)
Density	ISO 1183	g/cm³	1.06	1.04	1.02	1.01	
Melt Point	ISO 11357 (D 3418)	°C	160	110	178	178	(177)
Dielectric Strength	IEC 60243 (D 149)	kV/mm	31	32	32	26	30
Volume Resistivity	IEC 60093 (D 257)	Ω • cm	Ω • M 10 <sup>11</sup>	Ω • M 10 <sup>11</sup>	-	10 <sup>15</sup>	10 <sup>14</sup>
Moisture Absorption 23/50% r.h.	ISO 62 (D 570)	%	1.5	1.0	1.1	0.7	(0.8)

NOTE: All data courtesy of Atofina Chemicals, Inc., EMS-CHEMIE, Inc. and Degussa AG. Properties are based on unpigmented, unfilled resin per relevant ISO, IEC or ASTM-D.

#### MARKET APPLICATIONS:

- Automotive
- Domestic appliances
- Electronics
- Mechanical engineering
- Medical
- Optical



# ZEUS®

Solutions Start Here.

www.zeusinc.com/nylon  
+1 800.526.3842  
+1 803.268.9500  
F +1 803.533.5694

ISO 9001 Certified

