

Property	Value
CAS Number	32131-17-2
Formula	$C_{12}H_{22}N_2O_2)_n$
Specific gravity	1.14
Melt temperature °C	263
Water absorption, 24 hours %	8.5
Tensile strength, psi	12400
Elongation % at 73 °F	90
Flexural strength, psi at 73 °F	17000
Flexural modulus, psi at 73 °F	4.1×10^5
Rockwell hardness ft-lbs/in	1.2
Heat deflection °F	455
Volume Resistivity, 73°F ohm-cm	1015
Dielectric Constant, 60 Hz, 73°F, 50% RH	4
Dielectric Strength V/mil	600

Volume Resistivity, 73°F	D257	ohm-cm	1015
Dielectric Constant, 60 Hz, 73°F, 50% RH	D150	----	4
Dielectric Strength	D149	V/mil	600

Physical Properties	ASTM Test Method	Units	Nylon 6/6	Nylon 6/6 GF30
Density	D792	lbs/cu in	0.0412	0.0488
Specific Gravity	D792	----	1.14	1.35
Water absorption, 24 hours, 73°F (23°C)	D570	%	8.5	0.7
Mechanical Properties	ASTM Test Method	Units	Nylon 6/6	Nylon 6/6 GF30
Tensile Strength 73°F	D638	psi	12,400	27,000
Elongation 73° F	D638	%	90	3
Flexural Strength, 73° F	D790	psi	17,000	39,100
Flexural Modulus, 73°F	D790	psi	4.1×10^5	12×10^5
Izod Impact Strength, Notched, 73°F	D256	----	R120 - M79	M101
Rockwell Hardness	D785	ft-lbs/in.	1.2	2.1
Thermal Properties	ASTM Test Method	Units	Nylon 6/6	Nylon 6/6 GF30
Heat Deflection	D648	degrees F	455	490
66 psi	D648	degrees F	194	482
264 psi				
Max. Temperature Long Term	----	degrees F	170	230
Short Term		degrees F	355	465
Coefficient of Linear Thermal Expansion	see below			
-20 to -200° F	D696	in./in./degrees F	4.5×10^{-5}	1.2×10^{-5}
200 to 460° F	D696	----	5.0×10^{-5}	----
Electrical Properties	ASTM Test Method	Units	Nylon 6/6	Nylon 6/6 GF30
Volume Resistivity, 73°F	D257	ohm-cm	1015	1015
Dielectric Constant, 60 Hz, 73°F, 50% RH	D150	----	4	----
Dielectric Strength	D149	V/mil	600	530