

# Terblend N NM-12

Acrylonitrile Butadiene Styrene / Polyamide (ABS/PA)

## TECHNICAL DATASHEET

### DESCRIPTION

Terblend® N NM-12 is an ABS/PA blend with good impact toughness and enhanced stiffness.

### FEATURES

- Enhanced rigidity
- Medium impact strength
- Easy processing

### APPLICATIONS

- Household parts
- Handles

Property, Test Condition	Standard	Unit	Values
<b>Rheological Properties</b>			
Melt Volume Rate, 240 °C/10 kg	ISO 1133	cm <sup>3</sup> /10 min	34
<b>Mechanical Properties</b>			
Tensile Modulus	ISO 527	MPa	2200
Tensile Stress at Yield, 23 °C	ISO 527	MPa	50
Tensile Strain at Yield, 23 °C	ISO 527	%	3.2
Nominal Strain at Break, 23 °C	ISO 527	%	20
Flexural Modulus, 23 °C	ISO 178	MPa	2200
Flexural Strength, 23 °C	ISO 178	MPa	74
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m <sup>2</sup>	17
Charpy Notched Impact Strength, -30 °C	ISO 179/1eA	kJ/m <sup>2</sup>	9
Izod Notched Impact Strength, 23 °C	ISO 180/A	kJ/m <sup>2</sup>	17
Izod Notched Impact Strength, -30 °C	ISO 180/A	kJ/m <sup>2</sup>	7
Hardness, Ball Indentation	ISO 2039-1	MPa	102
Tensile Modulus after Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 527	MPa	1600
Tensile Stress at Yield after Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 527	MPa	45
Tensile Strain at Yield after Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 527	%	5
Nominal Strain at Break after Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 527	%	> 50
<b>Thermal Properties</b>			

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Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	105
Vicat Softening Temperature, VST/A/50 (10N, 50 °C/h)	ISO 306	°C	170
Coefficient of Linear Thermal Expansion	ISO 11359	10 <sup>-6</sup> /°C	90
Heat Deflection Temperature A; (unannealed; 1.8 MPa)	ISO 75	°C	66
Heat Deflection Temperature B; (unannealed; 0.45 MPa)	ISO 75	°C	88
<b>Electrical Properties</b>			
Relative Permittivity (1 MHz)	IEC 62631-2-1	-	2.9
Dissipation Factor (1 MHz)	IEC 62631-2-1	10 <sup>-4</sup>	150
Volume Resistivity	IEC 62631-3-1	Ohm*m	>10 <sup>13</sup>
Surface Resistivity	IEC 62631-3-1	Ohm	10 <sup>14</sup>
<b>Other Properties</b>			
Density	ISO 1183	kg/m <sup>3</sup>	1070
Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 62	%	1.2
UL94 rating at 1.5 mm thickness	IEC 60695-11-10	-	HB
<b>Processing</b>			
Melt Temperature Range	ISO 294	°C	240 - 270
Mold Temperature Range	ISO 294	°C	60 - 80
Drying Temperature	-	°C	80 - 90
Drying Time	-	h	4 - 8
Molding shrinkage, free, longitudinal	-	%	0.7