INEOS STYROLUTION

TERBLEND N NM-21EF

Acrylonitrile Butadiene Styrene / Polyamide (ABS/PA)

TECHNICAL DATASHEET

DESCRIPTION

The product line Terblend® N, comprising blends of ABS with PA 6, provides very good mechanical properties, a high melt flow, and very good chemical resistance provided by the polyamide component. Parts from Terblend® have acoustic dampening properties and show in unpainted, textured surfaces a nice matt appearance. Terblend® N NM-21EF “Enhanced Flow” does not only provide a very high melt flow but contains also a powerful UV package. Superior mechanical properties together with the low emission profile make it suitable for unpainted, interior surfaces with high demand for colour fastness e.g. in automotive.

FEATURES

- Chemical resistance
- High flowability
- High surface quality
- Impact strength

APPLICATIONS

- Unpainted automotive interior: loudspeaker grills, air ventings
- Unpainted automotive interior: seat trims, centre consoles
- Housings for electronics & household devices
- Toys, sports & leisure
- Housings for electronics & household devices

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate, 240 °C/10 kg	ISO 1133	cm³/10 min	65
Mechanical Properties			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m²	70
Charpy Notched Impact Strength, -30 °C	ISO 179/1eA	kJ/m²	12
Izod Notched Impact Strength, 23 °C	ISO 180/A	kJ/m²	65
Izod Notched Impact Strength, -30 °C	ISO 180/A	kJ/m²	11
Tensile Modulus	ISO 527	MPa	2100
Tensile Stress at Yield, 23 °C	ISO 527	MPa	45
Tensile Strain at Yield, 23 °C	ISO 527	%	3.1
Tensile Stress at Break, 23 °C	ISO 527	MPa	33
Tensile Strain at Break, 23 °C	ISO 527	%	30
Nominal Strain at Break, 23 °C	ISO 527	%	25
Tensile Modulus after Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 527	MPa	1400
Tensile Stress at Yield after Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 527	MPa	36

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Property, Test Condition	Standard	Unit	Values
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
Flexural Modulus, 23 °C	ISO 178	MPa	2000
Flexural Strength, 23 °C	ISO 178	MPa	65
Hardness, Ball Indentation	ISO 2039-1	MPa	95.00
Thermal Properties			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	110
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	86
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	98
Coefficient of Linear Thermal Expansion	ISO 11359	10^{-6}/°C	100
Other Properties			
Density	ISO 1183	kg/m³	1070
UL94 rating at 1.5 mm thickness	IEC 60695-11-10	-	HB
Glow wire test (GWFI), 2.0 mm	IEC 60695-2-12	°C	650
Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 62	%	1.3
Processing			
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
Linear Mold Shrinkage	ISO 294-4	%	0.7 - 0.9