INEOS STYROLUTION

Terblend N NG-04EF

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 NG-04EF is a low emission 20% glass fiber reinforced "Enhanced Flow" grade, containing also a powerful UV package. The reinforcement provides a high heat performance and stiffness, for visible and structural parts.

FEATURES

- Chemical resistance
- Dimensional stabilty
- Heat resistance
- Reinforcement
- UV-stabilized
- Glass fiber reinforced (20%)

APPLICATIONS

- Painted/ decorated Automotive interior: glove boxes, centre consoles, instrument panel trims
- Toys, sports & leisure
- Extruded sheets & profiles

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate, 240 °C/10 kg	ISO 1133	cm³/10 min	25
Mechanical Properties			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m²	14
Charpy Notched Impact Strength, -30 °C	ISO 179/1eA	kJ/m²	8
Charpy Unnotched, 23 °C	ISO 179/1eU	kJ/m²	53
Charpy Unnotched, -30 °C	ISO 179/1eU	kJ/m²	51
Izod Notched Impact Strength, 23 °C (73 °F)	ASTM D 256	kJ/m²	16
Izod Notched Impact Strength, -30 °C (-22 °F)	ASTM D 256	kJ/m²	10
Tensile Modulus	ISO 527	MPa	5300
Tensile Stress at Yield, 23 °C	ISO 527	MPa	80
Tensile Strain at Yield, 23 °C	ISO 527	%	4
Tensile Stress at Break, 23 °C	ISO 527	MPa	80
Tensile Strain at Break, 23 °C	ISO 527	%	3.9
Tensile Modulus after Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 527	MPa	3998

INEOS STYROLUTION

Terblend N NG-04EF

Acrylonitrile Butadiene Styrene / Polyamide (ABS/PA)

TECHNICAL DATASHEET

Property, Test Condition	Standard	Unit	Values
Tensile Strain at Yield after Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 527	%	6.8
Flexural Modulus, 23 °C	ISO 178	MPa	4500
Flexural Strength, 23 °C	ISO 178	MPa	115
Hardness, Ball Indentation	ISO 2039-1	MPa	115
Thermal Properties			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	130
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	108
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	180
Coefficient of Linear Thermal Expansion	ISO 11359	10^{-6}/°C	35 (long)/ 130 (trans)
Other Properties			
Density	ISO 1183	kg/m³	1200
Glass Fibre content	-	%	20
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	%	0.9
Water Absorption, Saturated at 23 °C	ISO 62	%	3.9
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	%	0.3 - 0.4