INEOS STYROLUTION

Terblend N NG-02EF

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-02EF is a low emission 8% glass fiber reinforced “Enhanced Flow” grade, containing also a powerful UV package. The reinforcement provides a higher heat performance and is invisible in combination with most automotive surface textures.

FEATURES

- Chemical resistance
- Heat resistance
- High surface quality
- Reinforcement
- UV-stabilized
- Glass fiber reinforced (8%)

APPLICATIONS

- Unpainted automotive interior: loudspeaker grills, air ventings
- Unpainted automotive interior: steering wheel covers, roof consoles
- Unpainted automotive interior: overhead consoles
- Gardening tools

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate, 240 °C/10 kg	ISO 1133	cm³/10 min	40
Mechanical Properties			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m²	11
Charpy Notched Impact Strength, -30 °C	ISO 179/1eA	kJ/m²	6
Charpy Unnotched, 23 °C	ISO 179/1eU	kJ/m²	30
Charpy Unnotched, -30 °C	ISO 179/1eU	kJ/m²	35
Izod Notched Impact Strength, 23 °C	ISO 180/A	kJ/m²	12
Izod Notched Impact Strength, -30 °C	ISO 180/A	kJ/m²	6
Tensile Modulus	ISO 527	MPa	3100
Tensile Stress at Yield, 23 °C	ISO 527	MPa	55
Tensile Strain at Yield, 23 °C	ISO 527	%	3
Tensile Stress at Break, 23 °C	ISO 527	MPa	50
Tensile Strain at Break, 23 °C	ISO 527	%	7
Nominal Strain at Break, 23 °C	ISO 527	%	6

INEOS STYROLUTION

Terblend N NG-02EF

Acrylonitrile Butadiene Styrene / Polyamide (ABS/PA)

TECHNICAL DATASHEET

Property, Test Condition	Standard	Unit	Values
Tensile Modulus after Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 527	MPa	2400
Tensile Stress at Yield after Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 527	MPa	40
Tensile Strain at Yield after Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 527	%	4
Nominal Strain at Break after Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 527	%	12
Flexural Modulus, 23 °C	ISO 178	MPa	2800
Flexural Strength, 23 °C	ISO 178	MPa	85
Hardness, Ball Indentation	ISO 2039-1	MPa	99
Thermal Properties			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	118
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	97
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	171
Coefficient of Linear Thermal Expansion	ISO 11359	10^{-6}/°C	60
Other Properties			
Density	ISO 1183	kg/m³	1120
Glass Fibre content	-	%	8
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	%	1.1
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	%	0.5 - 0.8