

Terblend S NM-31

Acrylonitrile Styrene Acrylate / Polyamide (ASA/PA)

TECHNICAL DATASHEET

DESCRIPTION

Terblend® S is a UV-stabilized ASA/PA blend with high impact strength, easy flow and pronounced color fastness. It is especially suitable for unpainted highly UV-exposed automotive interior parts.

FEATURES

- Enhanced UV resistance and color fastness
- Excellent flow for high surface quality appearance
- High impact strength
- UV-stabilized

APPLICATIONS

- Unpainted automotive interior parts
- Trim for convertibles
- Under the windscreen interior applications

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate, 240 °C/10 kg	ISO 1133	cm ³ /10 min	60
Mechanical Properties			
Tensile Modulus	ISO 527	MPa	2100
Tensile Stress at Yield, 23 °C	ISO 527	MPa	50
Tensile Strain at Yield, 23 °C	ISO 527	%	3.3
Nominal Strain at Break, 23 °C	ISO 527	%	25
Flexural Modulus, 23 °C	ISO 178	MPa	2000
Flexural Strength, 23 °C	ISO 178	MPa	65
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m ²	70
Charpy Notched Impact Strength, -30 °C	ISO 179/1eA	kJ/m ²	9
Izod Notched Impact Strength, 23 °C	ISO 180/A	kJ/m ²	65
Izod Notched Impact Strength, -30 °C	ISO 180/A	kJ/m ²	8
Tensile Modulus after Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 527	MPa	1300
Tensile Stress at Yield after Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 527	MPa	35
Tensile Strain at Yield after Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 527	%	7
Nominal Strain at Break after Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 527	%	> 50
Thermal Properties			

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Property, Test Condition	Standard	Unit	Values
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	110
Vicat Softening Temperature, VST/A/50 (10N, 50 °C/h)	ISO 306	°C	205
Coefficient of Linear Thermal Expansion	ISO 11359	10 ⁻⁶ /°C	100
Heat Deflection Temperature A; (unannealed; 1.8 MPa)	ISO 75	°C	65
Heat Deflection Temperature B; (unannealed; 0.45 MPa)	ISO 75	°C	92
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	87
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	97
Electrical Properties			
Relative Permittivity (1 MHz)	IEC 62631-2-1	-	3.4
Dissipation Factor (1 MHz)	IEC 62631-2-1	10 ⁻⁴	180
Volume Resistivity	IEC 62631-3-1	Ohm*m	>10 ¹³
Surface Resistivity	IEC 62631-3-1	Ohm	10 ¹⁴
Other Properties			
Density	ISO 1183	kg/m ³	1070
Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 62	%	1.5
UL94 rating at 1.5 mm thickness	IEC 60695-11-10	-	HB
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
Molding shrinkage, free, longitudinal	-	%	0.7 - 0.9