

Terblend® S NM-31
 (ASA+PA6)

INEOS Styrolution

Terblend® S NM-31 is a blend of ASA with PA 6, provides very good mechanical properties, a high melt flow, and an excellent chemical resistance. The ASA component assures a high UV resistance for all kind of interior applications – incl. unpainted surfaces in light colors – but also for exterior parts with medium weatherability requirements. Parts from Terblend® have acoustic dampening properties and show in unpainted, textured surfaces a nice matt appearance. Terblend® S NM-31 provides a very high melt flow and similar mechanical properties as Terblend® N NM-21EF. It is a low emission grade that can be used e.g. as drop-in solution for unpainted, automotive interior applications in light colours.

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	60 / *	cm ³ /10min	ISO 1133
Temperature	240 / *	°C	-
Load	10 / *	kg	-

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	2100 / 1300	MPa	ISO 527
Yield stress	50 / 35	MPa	ISO 527
Yield strain	3.3 / 7	%	ISO 527
Nominal strain at break	25 / >50	%	ISO 527
Notched Impact Strength (Charpy), +23 °C	70 / -	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy), -30 °C	9 / -	kJ/m ²	ISO 179/1eA

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	65 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	92 / *	°C	ISO 75-1/-2
Vicat softening temperature, 50 °C/h 50N	110 / *	°C	ISO 306
Coeff. of Linear Therm. Expansion, parallel	100 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	HB / *	class	UL 94
Thickness tested	1.6 / *	mm	-
Burning Behav. at thickness h	HB / *	class	UL 94
Thickness tested	3.2 / *	mm	-

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Humidity absorption	1.5 / *	%	Sim. to ISO 62
Density	1070 / -	kg/m ³	ISO 1183

Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Density of melt	928	kg/m ³	-
Thermal Conductivity of Melt	0.363	W/(m K)	-
Spec. heat capacity of melt	2670	J/(kg K)	-
Ejection temperature	90	°C	-

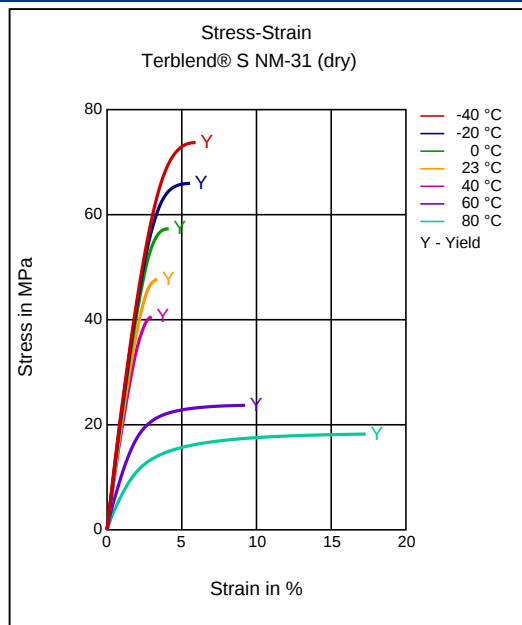
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 4	h	-
Melt temperature	240 - 270	°C	-
Mold temperature	40 - 80	°C	-

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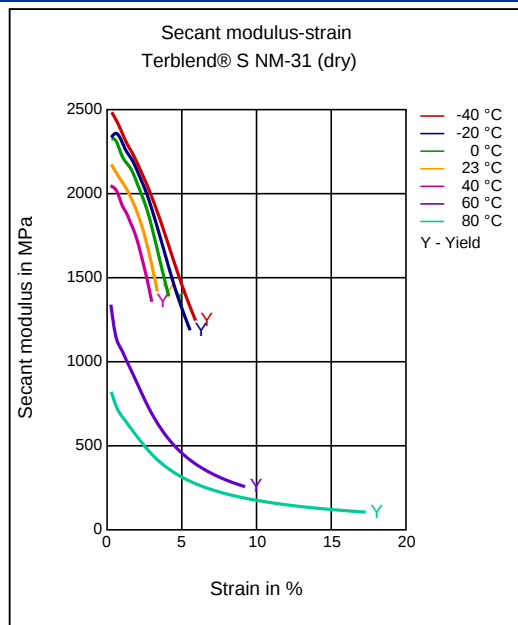
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Diagrams

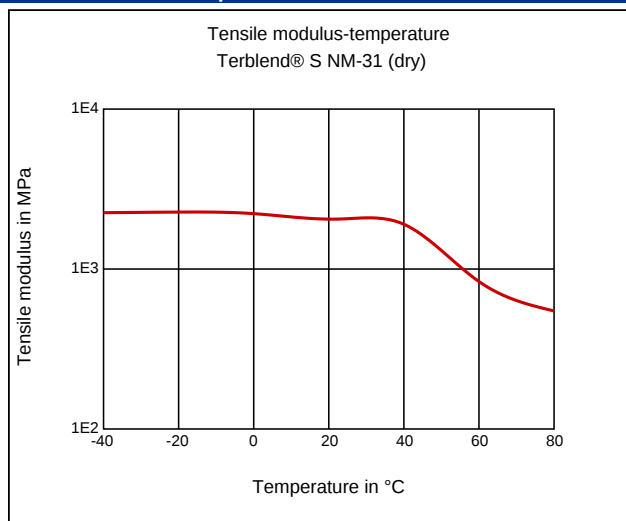
Stress-strain



Secant modulus-strain



Tensile Modulus-Temperature



Characteristics

Processing

Injection Molding

Delivery form

Pellets

Special Characteristics

Light stabilized or stable to light, UV stabilized, Heat aging stabilized

Injection Molding

PREPROCESSING

Pre-drying, Temperature: 80 - 90 °C

Pre-drying, Time: 4 - 8h

PROCESSING

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Melt temperature, range: 240 - 270°C

Mold temperature, range: 40 - 80°C