

Terblend® N NM-11
(ABS+PA6)

INEOS Styrolution

Terblend® N,NM-11 is a blend 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® NG-02EF have acoustic dampening properties and show in unpainted, textured surfaces a nice matt appearance. Terblend® N NM-11 provides balanced properties and keeps its high impact properties also in combination with a very high concentration of colorants. Its rather low melt flow makes it also well suitable for extrusion applications.

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	30 / *	cm³/10min	ISO 1133
Temperature	240 / *	°C	-
Load	10 / *	kg	-

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	2000 / 1400	MPa	ISO 527
Yield stress	43 / 34	MPa	ISO 527
Yield strain	3.5 / 5.5	%	ISO 527
Nominal strain at break	>50 / >50	%	ISO 527
Notched Impact Strength (Charpy), +23°C	65 / -	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	15 / -	kJ/m²	ISO 179/1eA

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	85 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	97 / *	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	102 / *	°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	1.5 / *	mm	-
UL recognition	yes / *	-	-
Burning Behav. at thickness h	HB / *	class	UL 94
Thickness tested	3.0 / *	mm	-
UL recognition	yes / *	-	-

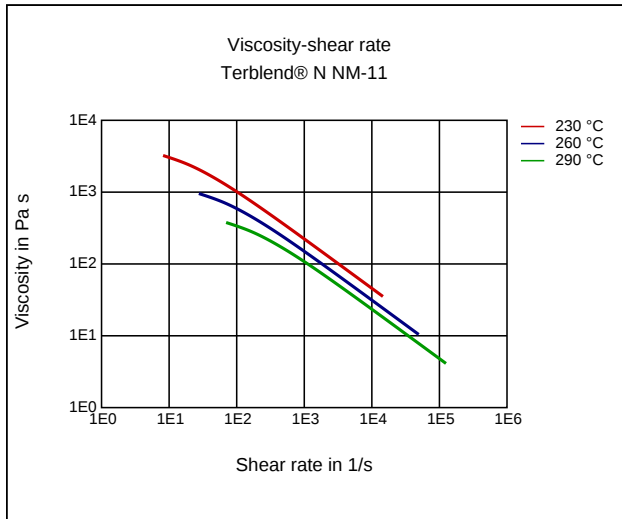
Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Humidity absorption	1.2 / *	%	Sim. to ISO 62
Density	1070 / -	kg/m³	ISO 1183

Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Density of melt	928	kg/m³	-
Thermal Conductivity of Melt	0.15	W/(m K)	-
Spec. heat capacity of melt	2410	J/(kg K)	-
Ejection temperature	90	°C	-

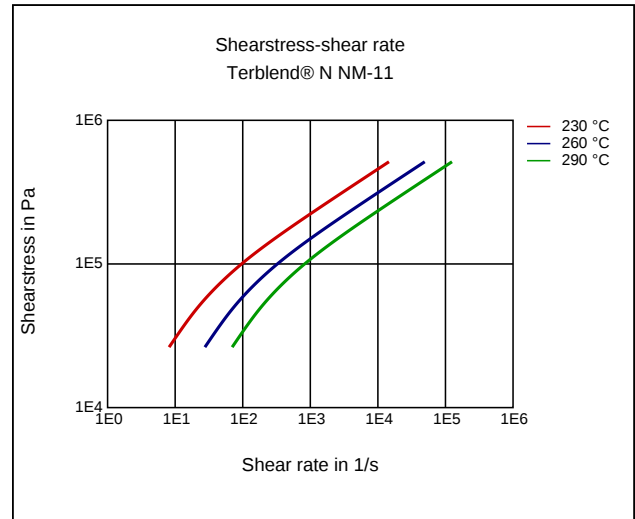
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 4	h	-
Melt temperature	240 - 270	°C	-
Mold temperature	40 - 80	°C	-

Diagrams

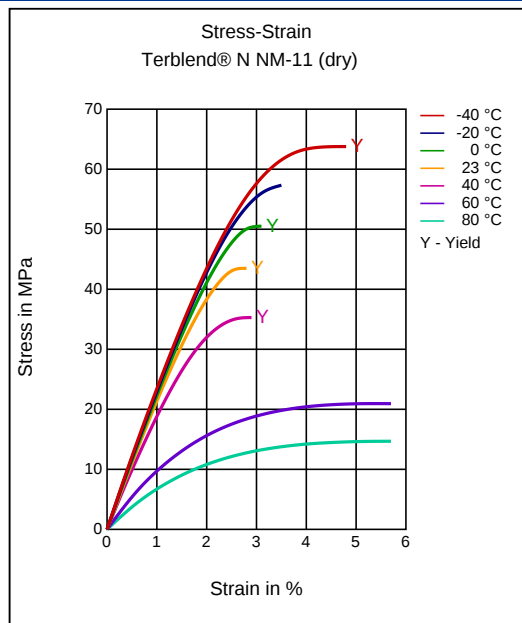
Viscosity-shear rate



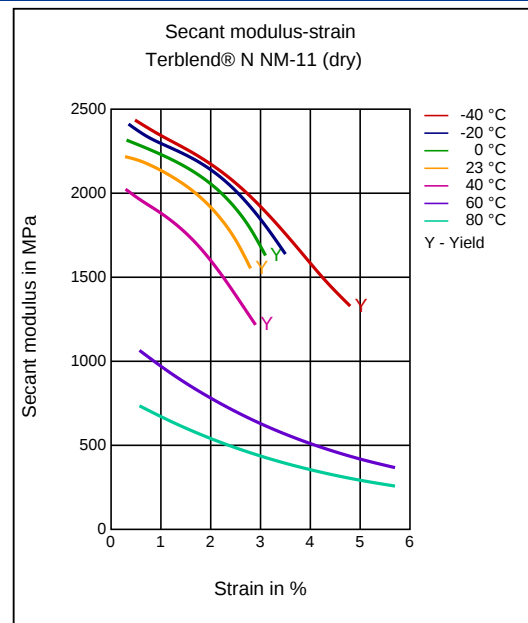
Shearstress-shear rate



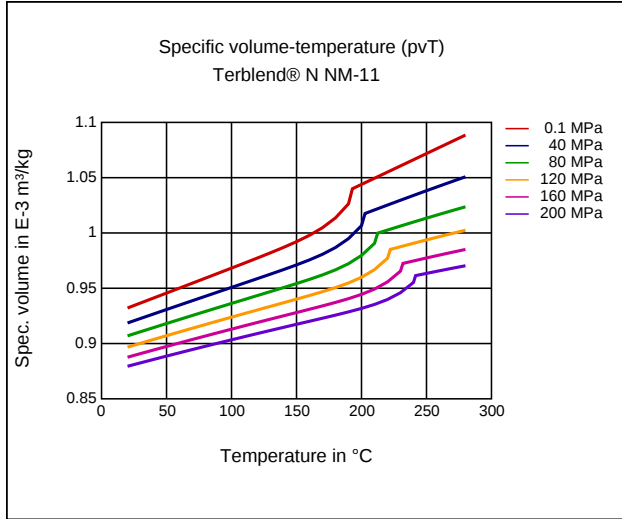
Stress-strain



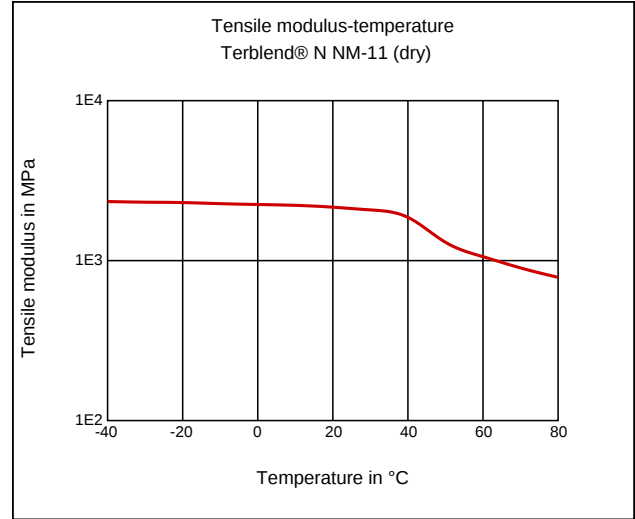
Secant modulus-strain



Specific volume-temperature (pvT)



Tensile Modulus-Temperature



Characteristics

Processing

Injection Molding

Delivery form

Pellets

Injection Molding

PREPROCESSING

Pre-drying, Temperature: 80 - 90 °C

Pre-drying, Time: 4 - 8h

PROCESSING

Melt temperature, range: 240 - 270 °C

Mold temperature, range: 40 - 80 °C

Special Characteristics

Anti-static

Chemical Media Resistance

Acids

- ✓ Acetic Acid (5% by mass) (23 °C)
- ✓ Citric Acid solution (10% by mass) (23 °C)
- ✓ Lactic Acid (10% by mass) (23 °C)
- ✓ Hydrochloric Acid (36% by mass) (23 °C)
- ✓ Sulfuric Acid (5% by mass) (23 °C)

Bases

- ✓ Sodium Hydroxide solution (35% by mass) (23 °C)
- ✓ Sodium Hydroxide solution (1% by mass) (23 °C)

Alcohols

- ✓ Methanol (23 °C)
- ✓ Ethanol (23 °C)

Hydrocarbons

- ✓ iso-Octane (23 °C)

Standard Fuels

- ✓ Diesel fuel (pref. ISO 1817 Liquid F) (23°C)

Salt solutions

- ✓ Sodium Chloride solution (10% by mass) (23°C)
- ✓ Sodium Hypochlorite solution (10% by mass) (23°C)
- ✓ Sodium Carbonate solution (20% by mass) (23°C)
- ✓ Sodium Carbonate solution (2% by mass) (23°C)
- ✓ Zinc Chloride solution (50% by mass) (23°C)

Other

- ✓ 1% nonylphenoxy-polyethyleneoxy ethanol in water (23°C)
- ✓ Water (23°C)

Disclaimer

Liability Exclusion

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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