



<b>Stanyl® TE300</b>			
<b>PA46</b>		DSM Engineering Plastics	
<b>Product Texts</b>			
Heat Stabilized			
ISO 1043 PA46			
<b>Mechanical properties</b>			
	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Tensile Modulus	3300 / 1000	MPa	ISO 527-1/-2
Yield stress	100 / 55	MPa	ISO 527-1/-2
Yield strain	10 / 20	%	ISO 527-1/-2
Nominal strain at break	40 / >50	%	ISO 527-1/-2
Tensile creep modulus, 1000h	* / 550	MPa	ISO 899-1
Charpy impact strength (+23°C)	N / N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	N / N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	10 / 35	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	4 / 4	kJ/m <sup>2</sup>	ISO 179/1eA
<b>Thermal properties</b>			
	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Melting temperature (10°C/min)	295 / *	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	75 / *	°C	ISO 11357-1/-2
Temp. of deflection under load (1.80 MPa)	190 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	280 / *	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	290 / *	°C	ISO 306
Coeff. of linear therm. expansion, parallel	85 / *	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	110 / *	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	V-2 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-
Burning behav. at thickness h	V-2 / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-
Oxygen index	27 / *	%	ISO 4589-1/-2
<b>Electrical properties</b>			
	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Relative permittivity, 100Hz	4 / 13	-	IEC 60250
Relative permittivity, 1MHz	3.6 / 4.3	-	IEC 60250
Dissipation factor, 100Hz	70 / 1400	E-4	IEC 60250
Dissipation factor, 1MHz	260 / 1000	E-4	IEC 60250
Volume resistivity	1E13 / 1E10	Ohm*m	IEC 60093
Surface resistivity	* / 1E14	Ohm	IEC 60093
Electric strength	25 / 20	kV/mm	IEC 60243-1
Comparative tracking index	600 / -	-	IEC 60112
<b>Other properties</b>			
	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Water absorption	13.5 / *	%	Sim. to ISO 62
Humidity absorption	3.7 / *	%	Sim. to ISO 62
Density	1180 / -	kg/m <sup>3</sup>	ISO 1183

**Stanyl® TE300**

PA46

DSM Engineering Plastics

**Material specific properties**

dry / cond

Unit

Test Standard

**ISO Data**

Viscosity number

175 / \*

cm<sup>3</sup>/g

ISO 307, 1157, 1628

**Characteristics****Processing**

Injection Molding

**Special Characteristics**

Heat stabilized or stable to heat

**Delivery form**

Pellets

**Other text information****Injection Molding**[Injection Molding Recommendations](#)