

# Stanyl<sup>®</sup> TW341-FC

## PA46

Heat Stabilized, Lubricated, Food Contact Quality

<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
<b>RHEOLOGICAL PROPERTIES</b>			
	<i>DRY / COND</i>		
Molding shrinkage [parallel]	2 / *	%	Sim. to ISO 294-4
Molding shrinkage [normal]	2 / *	%	Sim. to ISO 294-4
<b>MECHANICAL PROPERTIES</b>			
	<i>DRY / COND</i>		
Tensile modulus	3300 / 1000	MPa	ISO 527-1/-2
Tensile modulus (120°C)	800 / -	MPa	ISO 527-1/-2
Tensile modulus (160°C)	650	MPa	ISO 527-1/-2
Tensile modulus (180°C)	600	MPa	ISO 527-1/-2
Tensile modulus (200°C)	500	MPa	ISO 527-1/-2
Yield stress	100 / 55	MPa	ISO 527-1/-2
Yield stress (120°C)	50	MPa	ISO 527-1/-2
Yield stress (160°C)	40	MPa	ISO 527-1/-2
Yield stress (180°C)	35	MPa	ISO 527-1/-2
Yield stress (200°C)	30	MPa	ISO 527-1/-2
Nominal strain at break	40 / >50	%	ISO 527-1/-2
Nominal strain at break (120°C)	>50	%	ISO 527-1/-2
Nominal strain at break (160°C)	>50	%	ISO 527-1/-2
Nominal strain at break (180°C)	>50	%	ISO 527-1/-2
Nominal strain at break (200°C)	>50	%	ISO 527-1/-2
Flexural modulus	3000 / 900	MPa	ISO 178
Flexural modulus (120°C)	800	MPa	ISO 178
Flexural modulus (160°C)	600	MPa	ISO 178
Flexural strength	150 / 50	MPa	ISO 178

## Property Data

# Stanyl® TW341–FC

<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
Flexural strength (120°C)	50	MPa	ISO 178
Flexural strength (160°C)	40	MPa	ISO 178
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
Izod notched impact strength (+23°C)	10 / 35	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength (–40°C)	4 / 4	kJ/m <sup>2</sup>	ISO 180/1A
<b><i>THERMAL PROPERTIES</i></b>		<b><i>DRY / COND</i></b>	
Melting temperature (10°C/min)	295 / *	°C	ISO 11357–1/–3
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
Coeff. of linear therm. expansion (parallel)	0.85 / *	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	1.1 / *	E–4/°C	ISO 11359–1/–2
Thermal Index 5000 hrs	152	°C	IEC 60216/ISO 527–1/–2
<b><i>ELECTRICAL PROPERTIES</i></b>		<b><i>DRY / COND</i></b>	
Volume resistivity	1E13 / 1E7	Ohm*m	IEC 62631–3–1
Electric strength	25 / 15	kV/mm	IEC 60243–1
Comparative tracking index	400 / –	V	IEC 60112
Relative permittivity (100Hz)	3.9 / 22	–	IEC 62631–2–1
Relative permittivity (1 MHz)	3.6 / 4.5	–	IEC 62631–2–1
<b><i>OTHER PROPERTIES</i></b>		<b><i>DRY / COND</i></b>	
Humidity absorption	3.7 / *	%	Sim. to ISO 62
Density	1180 / –	kg/m <sup>3</sup>	ISO 1183

Property Data

# Stanyl® TW341-FC

Tens. fatigue 8Hz, T, R=0.1,  
dry

