Stanyl®

Stanyl® Diablo HDT2700
PA46-GF40
40% Glass Reinforced, Heat Stabilized

Print Date: 2019-04-11

Properties	Typical Data	Unit	Test Method
Rheological properties	dry / cond		
Molding shrinkage (parallel)	0.5 / *	%	ISO 294-4
Molding shrinkage (normal)	1 / *	%	ISO 294-4
Mechanical properties	dry / cond		
Tensile modulus	13500 / 7000	MPa	ISO 527-1/-2
Tensile modulus (120°C)	5400 / -	MPa	ISO 527-1/-2
Tensile modulus (160°C)	5000	MPa	ISO 527-1/-2
Tensile modulus (180°C)	4500	MPa	ISO 527-1/-2
Tensile modulus (200°C)	4000	MPa	ISO 527-1/-2
Stress at break	220 / 130	MPa	ISO 527-1/-2
Stress at break (120°C)	105 / -	MPa	ISO 527-1/-2
Stress at break (160°C)	85	MPa	ISO 527-1/-2
Stress at break (180°C)	75	MPa	ISO 527-1/-2
Stress at break (200°C)	65	MPa	ISO 527-1/-2
Strain at break	3 / 5.5	%	ISO 527-1/-2
Strain at break (120°C)	7 / -	%	ISO 527-1/-2
Strain at break (160°C)	8	%	ISO 527-1/-2
Strain at break (180°C)	8.5	%	ISO 527-1/-2
Strain at break (200°C)	9	%	ISO 527-1/-2
Flexural modulus	13000 / -	MPa	ISO 178
Flexural modulus (120°C)	5800	MPa	ISO 178
Flexural modulus (160°C)	5500	MPa	ISO 178
Flexural modulus (180°C)	5000	MPa	ISO 178

HEALTH · NUTRITION · MATERIALS

DSM
BRIGHT SCIENCE. BRIGHTER LIVING.

Stanyl® Diablo HDT2700

Print Date: 2019-04-11

Properties	Typical Data	Unit	Test Method
Flexural modulus (200°C)	4500	MPa	ISO 178
Charpy impact strength (+23°C)	80 / 90	kJ/m²	ISO 179/1eU
Charpy impact strength (−30°C)	65 / 75	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	13.5 / 20	kJ/m²	ISO 179/1eA
Charpy notched impact strength (−30°C)	12 / 12	kJ/m²	ISO 179/1eA
Izod notched impact strength (+23°C)	14 / 22	kJ/m²	ISO 180/1A

Thermal properties

	dry / cond		
Melting temperature (10°C/min)	285 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	263 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	275 / *	°C	ISO 75-1/-2

Other properties

	dry / cond		
Humidity absorption	2.3 / *	%	Sim. to ISO 62
Density	1480 / –	kg/m³	ISO 1183

DSM
BRIGHT SCIENCE. BRIGHTER LIVING.

HEALTH · NUTRITION · MATERIALS