

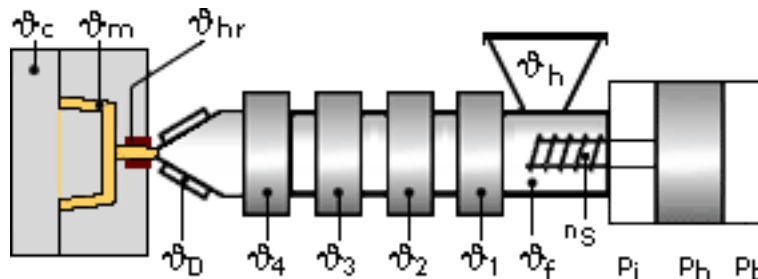
CELSTRAN® PA6-GF50-01 | PA6 | Glass Reinforced

Description

50% long strand fiber glass reinforced nylon 6 Natural

Physical properties	Value	Unit	Test Standard
Density	1560	kg/m ³	ISO 1183
Mechanical properties	Value	Unit	Test Standard
Tensile modulus (1mm/min)	16000	MPa	ISO 527-2/1A
Tensile stress at break (5mm/min)	245	MPa	ISO 527-2/1A
Tensile strain at break (5mm/min)	2.02	%	ISO 527-2/1A
Flexural modulus (23°C)	14700	MPa	ISO 178
Flexural strength (23°C)	390	MPa	ISO 178
Charpy notched impact strength @ 23°C	39	kJ/m ²	ISO 179/1eA
Thermal properties	Value	Unit	Test Standard
DTUL @ 1.8 MPa	215	°C	ISO 75-1/-2

Typical injection moulding processing conditions



Pre Drying:

Necessary low maximum residual moisture content: 0.18%

CELSTRAN PA should in principle be predried. Because of the necessary low maximum residual moisture content the use of dry air dryers is recommended. The dew point should be $\leq -30^{\circ}\text{C}$. The time between drying and processing should be as short as possible.

Note: Material can be over dried and may discolor.

Drying time: 2 - 4 h

Drying temperature: 70 - 80 °C

Temperature:

	φ_Mold	φ_Melt	φ_Nozzle	φ_Zone4	φ_Zone3	φ_Zone2	φ_Zone1	φ_Feed	φ_Hopper
min (°C)	80	270	275	275	275	270	265	20	70
max (°C)	100	280	280	280	280	275	275	50	80

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Injection Molding

Celstran can be processed on a standard injection molding unit. A general purpose metering screw is recommended with a zone distribution of 40% feed, 40% transition, and 20% metering. A free flowing check ring assembly is recommended.

Melt Temp: 285-295°C.
Mold Temp: 85- 95°C.

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