

CELSTRAN® PA6-GF30-01 - PA6

Description

30% long strand glass fiber reinforced nylon 6
30% long strand glass fiber reinforced nylon 6 Black

Physical properties	Value	Unit	Test Standard
Density	84.9	lb/ft ³	ISO 1183

Mechanical properties	Value	Unit	Test Standard
Tensile modulus	1.38E6	psi	ISO 527-1, -2
Tensile stress at break, 5mm/min	22500	psi	ISO 527-1, -2
Tensile strain at break, 5mm/min	1.78	%	ISO 527-1, -2
Flexural modulus, 23°C	1.28E6	psi	ISO 178
Flexural strength, 23°C	36300	psi	ISO 178
Charpy notched impact strength, 23°C	8.56	ft-lb/in ²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
DTUL at 1.8 MPa	405	°F	ISO 75-1, -2

Typical injection moulding processing conditions

Pre Drying	Value	Unit
Necessary low maximum residual moisture content	0.18	%
Drying time	2 - 4	h
Drying temperature	158 - 176	°F

Temperature	Value	Unit
Hopper temperature	158 - 176	°F
Feeding zone temperature	68 - 122	°F
Zone1 temperature	500 - 518	°F
Zone2 temperature	509 - 527	°F
Zone3 temperature	518 - 536	°F
Zone4 temperature	518 - 536	°F
Nozzle temperature	518 - 536	°F
Melt temperature	518 - 536	°F
Mold temperature	176 - 212	°F

Other text information

Pre-drying

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 ≤ -30°C. The time between drying and processing should be as short as possible.

Longer pre-drying times/storage

Note: Material can be over dried and may discolor.

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: 270-280°C.

Mold Temp: 85- 95°C.

Characteristics

Special Characteristics	Chemical resistant, Fuel resistant
Product Categories	Glass reinforced, Tribological
Processing	Injection compression molding, Injection molding, Transfer molding
Delivery Form	Pellets

General Disclaimer

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