

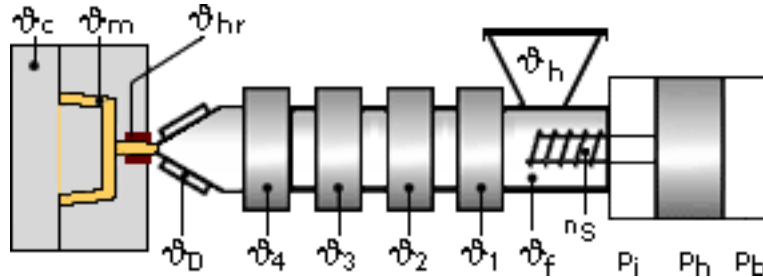
CELSTRAN® PA6-GF30-01 | PA6 | Glass Reinforced

Description

30% long strand glass fiber reinforced nylon 6 Black

Physical properties	Value	Unit	Test Standard
Density	1360	kg/m ³	ISO 1183
Mechanical properties	Value	Unit	Test Standard
Tensile modulus (1mm/min)	9510	MPa	ISO 527-2/1A
Tensile stress at break (5mm/min)	155	MPa	ISO 527-2/1A
Tensile strain at break (5mm/min)	1.78	%	ISO 527-2/1A
Flexural modulus (23°C)	8830	MPa	ISO 178
Charpy notched impact strength @ 23°C	18	kJ/m ²	ISO 179/1eA
Thermal properties	Value	Unit	Test Standard
DTUL @ 1.8 MPa	207	°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:

	θ_{Mold}	θ_{Melt}	θ_{Nozzle}	θ_{Zone4}	θ_{Zone3}	θ_{Zone2}	θ_{Zone1}	θ_{Feed}	θ_{Hopper}
min (°C)	80	270	270	270	270	265	260	20	70
max (°C)	100	280	280	280	280	275	270	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: 270-280°C.
Mold Temp: 85- 95°C.

Contact Information

Americas

8040 Dixie Highway, Florence, KY 41042 USA

Product Information Service

t: +1-800-833-4882 t: +1-859-372-3244

Customer Service

t: +1-800-526-4960 t: +1-859-372-3214

e: info-engineeredmaterials-am@celanese.com

Asia

4560 Jinke Road, Zhang Jiang Hi Tech Park

Shanghai 201203 PRC

Customer Service

t: +86 21 3861 9266 f: +86 21 3861 9599

e: info-engineeredmaterials-asia@celanese.com

Europa

Am Unisys-Park 1, 65843 Sulzbach, Germany

Product Information Service

t: +(00)-800-86427-531 t: +49-(0)-69-45009-1011

e: info-engineeredmaterials-eu@celanese.co

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