CELSTRAN® PA66-AF35-02 AF3003 NATURAL

CELSTRAN® Long Fibre

Celstran® PA66-AF35-02 is a 35% long aramid fiber Polyamide. This material imparts excellent wear resistance along with impact and modulus properties that can only be achieved through the use of long fiber technology.

Product information

Resin Identification	PA66-LAF35	ISO 1043
Part Marking Code	>PA66-LAF35<	ISO 11469

Typical mechanical properties

Tensile modulus	1.49E6	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	18900	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	1.8	%	ISO 527-1/-2
Flexural modulus	1.26E6	psi	ISO 178
Flexural strength	28300	psi	ISO 178
Charpy notched impact strength, 23°C	7.14	ftlb/in²	ISO 179/1eA
Izod notched impact strength, 23°C	6.85	ftlb/in²	ISO 180/1A

Thermal properties

Temperature of deflection under load, 1.8 MPa	475	°F	ISO 75-1/-2

Physical/Other properties

Density	0.044	lb/in³	ISO 1183

Injection

Drying Recommended	yes	
Drying Temperature	176	°F
Drying Time, Dehumidified Dryer	2 - 4	h
Processing Moisture Content	≤0.2	%
Melt Temperature Optimum	572	°F
Min. melt temperature	545	°F
Max. melt temperature	581	°F
Max. screw tangential speed	≤0.2	m/s
Mold Temperature Optimum	212	°F
Min. mold temperature	158	°F
Max. mold temperature	248	°F
Hold pressure range	7250 - 14500	psi
Hold Pressure Time (h is the max. wall thickness of the part in mm)	h²+2	s

Characteristics

Processing	Injection Molding
Special characteristics	Heat stabilized or stable to heat, Low wear / Low friction

Additional information

Injection molding

Preprocessing

PA6&PA66 drying requirements: 4 hrs. @80° C.
A dehumidifier or desiccant dryer is recommended.

Revised: 2025-07-10 Source: Celanese Materials Database

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Processing

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: 305-310 °C.
Mold Temp: 85- 95 °C.

Processing Notes

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.

Storage

Note: Material can be over dried and may discolor.

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