

CELSTRAN® PPS-AF35-01 - PPS

Description

35% aramid fiber reinforced polyphenylene sulfide.
PPS with 35% aramid fiber by weight

Physical properties	Value	Unit	Test Standard
Density	84.3	lb/ft ³	ISO 1183

Mechanical properties	Value	Unit	Test Standard
Tensile modulus	1.28E6	psi	ISO 527-1, -2
Tensile stress at break, 5mm/min	11200	psi	ISO 527-1, -2
Tensile strain at break, 5mm/min	1.35	%	ISO 527-1, -2
Flexural modulus, 23°C	1.23E6	psi	ISO 178
Flexural strength, 23°C	20300	psi	ISO 178
Charpy notched impact strength, 23°C	4.28	ft-lb/in ²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
DTUL at 1.8 MPa	500	°F	ISO 75-1, -2

Typical injection moulding processing conditions

Pre Drying	Value	Unit
Necessary low maximum residual moisture content	0.02	%
Drying time	3 - 4	h
Drying temperature	266 - 284	°F

Temperature	Value	Unit
Hopper temperature	158 - 176	°F
Feeding zone temperature	68 - 122	°F
Zone1 temperature	545 - 563	°F
Zone2 temperature	554 - 572	°F
Zone3 temperature	563 - 581	°F
Zone4 temperature	572 - 590	°F
Nozzle temperature	554 - 572	°F
Melt temperature	572 - 590	°F
Mold temperature	284 - 320	°F

Other text information

Pre-drying

FORTRON 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

For subsequent storage the material should be stored dry in the dryer until processed (≤ 60 h).

Characteristics

Product Categories	Aramid reinforced, Specialty
Delivery Form	Pellets