Celanese
The chemistry inside innovation™

CELSTRAN® POM-GF25-04 AF3001

Developmental 25% long glass fiber filled acetal copolymer
Material code according to ISO 1043-1: POM
Acetal copolymer reinforced with 25 weight percent long glass fibers. The fibers are chemically coupled to the POM matrix. The pellets are cylindrical and normally as well as the embedded fibers 10 mm long.
Parts molded of CELSTRAN have outstanding mechanical properties such as high strength and stiffness combined with high heat deflection. The notched impact strength is increased at elevated and low temperatures due to the fiber skeleton built in the parts. The long fiber reinforcement reduces creep significantly.
The very isotropic shrinkage in the molded parts minimizes the warpage.
Complex parts can be manufactured with high reproducibility by injection molding.
Application field: Functional/structural parts for automotive

Typical mechanical properties

Tensile Modulus	10300	MPa	ISO 527-1/-2
Stress at break, 50mm/min	177	MPa	ISO 527-1/-2
Strain at break, 5mm/min	2.35	%	ISO 527-1/-2
Flexural Modulus	9190	MPa	ISO 178
Flexural Strength	265	MPa	ISO 178
Charpy notched impact strength, 23°C	35	kJ/m²	ISO 179/1eA

Other properties

Density	1590	kg/m³	ISO 1183

Injection

Drying Temperature	80 - 90	°C
Drying Time, Dehumidified Dryer	3	h
Processing Moisture Content	0.15	%
Screw tangential speed	0.1	m/s
Max. mould temperature	70 - 110	°C
Back pressure	3	MPa
Injection speed	medium	

Processing Texts

Pre-drying	It is normally not necessary to dry CELSTRAN POM. However, should there be surface moisture (condensate) on the molding compound as a result of incorrect storage, drying is required. A circulating air drying cabinet can be used for this purpose if the gra
Longer pre-drying times/storage	The product can then be stored in standard conditions until processed.