



Chemlon® AS408

Teknor Apex Company (Chem Polymer) - Polyamide 66

General Information

Product Description

AS408 is a 40% glass-sphere filled, heat stabilised injection moulding grade of nylon 66. It has lower differential shrinkage and warpage and so is often suitable for use in applications requiring greater dimensional accuracy.

General

Material Status	• Commercial: Active
Availability	• Europe
Filler / Reinforcement	• Glass Bead, 40% Filler by Weight
Additive	• Heat Stabilizer
Features	• Good Stiffness • Low Shrinkage • Heat Stabilized • Low Warpage
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.44	--	g/cm ³	ISO 1183
Molding Shrinkage ²	0.90 to 1.5	--	%	Internal Method
Water Absorption Equilibrium, 73°F, 50% RH	1.5	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	914000	464000	psi	ISO 527-2
Tensile Stress	13100	6530	psi	ISO 527-2
Flexural Modulus	725000	334000	psi	ISO 178
Flexural Stress	22500	10900	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	2.4	3.8	ft-lb/in ²	ISO 179/1eA
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature 66 psi, Unannealed	464	--	°F	ISO 75-2/B
Heat Deflection Temperature 264 psi, Unannealed	428	--	°F	ISO 75-2/A
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+14	1.0E+11	ohms	IEC 60093
Volume Resistivity	1.0E+16	1.0E+14	ohms·cm	IEC 60093
Electric Strength (0.118 in)	380	330	V/mil	IEC 60243-1
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating 0.06 in, Teknor Apex test result	HB	--		UL 94
Glow Wire Flammability Index 0.06 in	1200	--	°F	IEC 60695-2-12
Oxygen Index	27	--	%	ISO 4589-2

Processing Information

Injection	Dry Unit
Drying Temperature	176 °F
Drying Time	2.0 hr
Rear Temperature	527 to 563 °F

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Injection	Dry	Unit
Middle Temperature	527 to 563	°F
Front Temperature	527 to 563	°F
Processing (Melt) Temp	536 to 563	°F
Mold Temperature	176 to 194	°F
Injection Rate	Fast	
Back Pressure	Low	
Screw Speed	Moderate	

Injection Notes

No drying is necessary unless the material has been exposed to air for longer than three hours. The appearance of splash marks on the surface of mouldings indicates excessive moisture is present.

Notes

¹ Typical properties: these are not to be construed as specifications.

² Mould shrinkage is significantly influenced by many factors including wall thickness, gating, moulding shape and processing conditions. The range values given are determined from specimen bar mouldings of 1.5mm to 4mm wall thickness. They are provided as a guide for comparison purposes only and no guarantee should be inferred from their inclusion. (Specimens measured in the dry state, 24 hours after moulding).