



Chemlon® 60Z

Teknor Apex Company (Chem Polymer) - Polyamide 6

General Information

Product Description

60Z is an industrial, unfilled injection moulding grade of nylon 6, suitable for applications requiring a low cost product of modest specification and wide tolerance.

General

Material Status	• Commercial: Active
Availability	• Europe
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.11 to 1.15	--	g/cm ³	ISO 1183
Molding Shrinkage ²	1.1 to 2.0	--	%	Internal Method
Water Absorption				ISO 62
Equilibrium, 73°F, 50% RH	2.8	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	363000	218000	psi	ISO 527-2
Tensile Stress	7980	4350	psi	ISO 527-2
Impact	Dry	Conditioned	Unit	Test Method
Notched Izod Impact Strength	1.4	3.8	ft·lb/in ²	ISO 180/A
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				ISO 75-2/B
66 psi, Unannealed	248	--	°F	
Heat Deflection Temperature				ISO 75-2/A
264 psi, Unannealed	131	--	°F	
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+14	1.0E+12	ohms	IEC 60093
Volume Resistivity	1.0E+16	1.0E+15	ohms·cm	IEC 60093
Electric Strength (0.118 in)	330	230	V/mil	IEC 60243-1
Comparative Tracking Index	600	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Oxygen Index	21	--	%	ISO 4589-2

Processing Information

Injection	Dry	Unit
Drying Temperature	176	°F
Drying Time	20	hr
Rear Temperature	446 to 536	°F
Middle Temperature	446 to 536	°F
Front Temperature	446 to 536	°F
Processing (Melt) Temp	464 to 518	°F
Mold Temperature	140 to 176	°F
Injection Rate	Fast	
Back Pressure	Low	
Screw Speed	Fast	

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.