



Chemlon® A25

Teknor Apex Company (Chem Polymer) - Polyamide 66

General Information

Product Description

A25 is a standard, unfilled injection moulding grade of nylon 66.

General

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

ASTM & ISO Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.14	--	g/cm ³	ISO 1183
Molding Shrinkage ²	1.1 to 1.7	--	%	Internal Method
Water Absorption (73°F, 24 hr)	1.2	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	406000	232000	psi	ISO 527-2
Tensile Stress (Yield)	10900	8700	psi	ISO 527-2
Flexural Modulus	421000	145000	psi	ISO 178
Flexural Stress ³	13800	5080	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	6.2 ft·lb/in ²	No Break		ISO 179
Charpy Unnotched Impact Strength	No Break	No Break		ISO 179
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature 66 psi, Unannealed	437	401	°F	ISO 75-2/B
Heat Deflection Temperature 264 psi, Unannealed	194	176	°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+15	ohms·cm	IEC 60093
Electric Strength (0.118 in)	460	300	V/mil	IEC 60243-1
Relative Permittivity	3.80	4.30		IEC 60250
Dissipation Factor (1 MHz)	0.020	0.080		IEC 60250
Comparative Tracking Index	> 600	> 600	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (0.06 in)	V-2	--		UL 94
Glow Wire Flammability Index 0.06 in	1380	--	°F	IEC 60695-2-12
Oxygen Index	27	--	%	ISO 4589-2

Processing Information

Injection	Dry	Unit
Drying Temperature	176 to 212	°F
Drying Time	2.0	hr
Rear Temperature	518 to 554	°F
Middle Temperature	518 to 554	°F
Front Temperature	518 to 554	°F

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Injection	Dry	Unit
Processing (Melt) Temp	< 572	°F
Mold Temperature	140 to 176	°F
Injection Rate	Fast	
Screw Speed	50 to 200	rpm

Injection Notes

No drying is necessary unless the material has been exposed to air for longer than three hours.

Back Pressure: Low

Injection Pressure: High

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, component shape and moulding conditions. The range values stated were 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).

³ At conventional deflection