LNP™ STAT-LOY™ Compound K3000Z

POM — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP STAT-LOY K3000Z compound is based on POM (Acetal) copolymer resin containing proprietary fillers. Added features of this grade include: Permanently Anti-Static.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	**1.8**	%	ISO 294-4, 2577
Molding shrinkage, normal	**1.8**	%	ISO 294-4, 2577
ASTM Data			
Mold Shrinkage, MD	**1.8**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**1.8**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**1500**	MPa	ISO 527
Yield stress	**41**	MPa	ISO 527
Yield strain	**13.3**	%	ISO 527
Stress at break	**36**	MPa	ISO 527
Strain at break	**49.2**	%	ISO 527
Flexural modulus	**1500**	MPa	ISO 178
Flexural strength	**40**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**N**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**15**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**1590**	MPa	ASTM D 638
Tensile Strength at Yield	**41**	MPa	ASTM D 638
Tensile Strength at Break	**32**	MPa	ASTM D 638
Elongation at Yield	**15.8**	%	ASTM D 638
Elongation at Break	**59.5**	%	ASTM D 638
Flexural Modulus	**1440**	MPa	ASTM D 790
Flexural Strength	**49**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**N**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**N**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ASTM Data			
DTUL @ 66 psi	**146**	°C	ASTM D 648
DTUL @ 264 psi	**67**	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Surface Resistivity	**1E11**	Ohm	ASTM D 257

Other properties	Value	Unit	Test Standard
Humidity absorption	**4.28**	%	Sim. to ISO 62
Density	**1330**	kg/m³	ISO 1183
Water Absorption, 24hr	**2.29**	%	ASTM D 570
Density	**1320**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**80**	°C	-
Pre-drying - Time	**4**	h	-
Melt temperature	**195 - 205**	°C	-
Mold temperature	**70 - 95**	°C	-
Zone 1	**175 - 190**	°C	-
Zone 2	**190 - 200**	°C	-
Zone 3	**200 - 210**	°C	-
Screw speed	**30 - 60**	rpm	-

Back pressure	**0.2 - 0.3**	MPa	-

Characteristics

Processing
Injection Molding

Regional Availability
North America, Europe, Asia Pacific