LNP™ STAT-KON™ Compound AE001 - Europe

ABS-CF7 — Saudi Basic Industries Corporation (SABIC)

Product Texts

NP STAT-KON AE001 compound is based on Acrylonitrile Butadiene Styrene (ABS) resin containing 7% carbon fiber. Added features of this grade include: Electrically Conductive.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	**0.003**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**0.003**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**5850**	MPa	ISO 527
Stress at break	**63**	MPa	ISO 527
Strain at break	**1.5**	%	ISO 527
Flexural modulus, 23°C	**5400**	MPa	ISO 178
Flexural strength	**88**	MPa	ISO 178
Charpy impact strength, +23°C	**15**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**6**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C	**25**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C	**7**	kJ/m²	ISO 180/1A
ASTM Data			
Flexural Modulus	**5630**	MPa	ASTM D 790
Flexural Strength	**89**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**60**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**198**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**101**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**107**	°C	ISO 75-1/-2
Vicat softening temperature, B	**104**	°C	ISO 306
Coeff. of linear therm. expansion, parallel	**33**	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**106**	E-6/K	ISO 11359-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	**33**	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	**106**	E-6/K	ASTM D 696
DTUL @ 66 psi	**106**	°C	ASTM D 648
DTUL @ 264 psi	**98**	°C	ASTM D 648
Vicat Temperature	**104**	°C	ASTM D 1525

Electrical properties	Value	Unit	Test Standard
Other Standards[S]			
Surface Resistivity	**1000**	Ohm	ASTM D 4496
Volume Resistivity	**100**	Ohm*cm	ASTM D 4496

S: These properties are reported by the producer according standards that are different to our defaults.

Other properties	Value	Unit	Test Standard
Water absorption	**0.85**	%	Sim. to ISO 62
Humidity absorption	**0.12**	%	Sim. to ISO 62
Density	**1070**	kg/m³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**80**	°C	-
Pre-drying - Time	**4**	h	-
Processing humidity	**≤0.1**	%	-
Melt temperature	**255 - 270**	°C	-
Mold temperature	**70 - 80**	°C	-
Feed temperature	**40**	°C	-

Zone 1	**220 - 240**	°C	-
Zone 2	**230 - 250**	°C	-
Zone 3	**240 - 270**	°C	-
Nozzle temperature	**240 - 270**	°C	-
Back pressure	**0.2 - 0.3**	MPa	-

Characteristics

Processing
Injection Molding

Applications
Electrical and Electronical

Special Characteristics
Increased electrical conductivity

Regional Availability
Europe