LNP™ STAT-KON™ Compound AE003 - Americas

ABS-CF15 | Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP STAT-KON AE003 compound is based on Acrylonitrile Butadiene Styrene (ABS) resin containing 15% carbon fiber. Added features of this grade include: Electrically Conductive.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	**0.1**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**0.55**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**11500**	MPa	ISO 527
Stress at break	**93**	MPa	ISO 527
Strain at break	**0.9**	%	ISO 527
Flexural modulus	**12300**	MPa	ISO 178
Flexural strength	**119**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**16**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**5**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**12840**	MPa	ASTM D 638
Tensile Strength at Break	**92**	MPa	ASTM D 638
Elongation at Break	**0.9**	%	ASTM D 638
Flexural Modulus	**12600**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**60**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**272**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**99**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**104**	°C	ISO 75-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	**19.1**	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	**66.1**	E-6/K	ASTM D 696
DTUL @ 66 psi	**105**	°C	ASTM D 648
DTUL @ 264 psi	**102**	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Surface Resistivity	**10000**	Ohm	ASTM D 257

Other properties	Value	Unit	Test Standard
Humidity absorption	**0.28**	%	Sim. to ISO 62
Water Absorption, 24hr	**0.19**	%	ASTM D 570
Density	**1140**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**80**	°C	-
Pre-drying - Time	**4**	h	-
Processing humidity	**≤0.1**	%	-
Melt temperature	**260**	°C	-
Mold temperature	**70 - 80**	°C	-
Zone 1	**205 - 215**	°C	-
Zone 2	**230 - 245**	°C	-
Zone 3	**265 - 275**	°C	-
Screw speed	**30 - 60**	rpm	-
Back pressure	**0.2 - 0.3**	MPa	-

Characteristics

Processing
Injection Molding

Special Characteristics
Increased electrical conductivity

Regional Availability
North America