BASF

PA6

B3EG6

Product information	
Manufacturer	BASF CORP
Color	NC
Material Shape	Pellets
Process	Injection molding
Viscosity	Low viscosity
FR	HB
Material Attribute	30%Glass Fiber Reinforced Injection grade Heat stabilized grade
Features	High flowGood electrical propertiesHeat Aging resistantHot water resistanceGood weather resistance
Application	Electrically Insulating PartsIndustrial Applications
Additives	Heat Stabilizer Lubricant Mold Releases

Electrical properties	Condition	Standard	Value	Unit
CTI	Solution A	IEC 60112	575	
Dielectric	Constant 1MHz	IEC 62631-2-1	3.8	6.8
Dissipation	Factor 1MHz	IEC 62631-2-1	0.023	0.22
Surface	Resistivity	IEC 62631-3-2	1E10	
Volume	Resistivity	IEC 62631	1E+13	1E10
Flammability	**Condition**	**Standard**	**Value**	**Unit**
Flame	Rating All Color 1.5mm	UL94	HB	
Flame	Rating All Color 3.0mm	UL94	HB	
Flame	Rating All Color 6.0mm	UL94	HB	
Mechanical behavior	**Condition**	**Standard**	**Value**	**Unit**
Charpy	Notch Impact 23°C 1eA	ISO 179	15	30
Charpy	Notch Impact -30°C 1eA	ISO 179	11	
Charpy	Notch Impact 23°C 1eA	ISO 179	15	
Charpy	Un-notch Impact 23°C	ISO 179	95	110
Charpy	Un-notch Impact -30°C	ISO 179	80	
Charpy	Un-notch Impact 23°C	ISO 179	95	
Elongation	Break	ISO 527	3.5	8
Flexural	Strength	ISO 178	270	180
Flexural	Modulus	ISO 178	8600	5000
Izod	Notch Impact 23°C	ISO 180	15.5	20
Izod	Notch Impact -30°C	ISO 180	11	
Izod	Notch Impact 23°C	ASTM D256	150	300
Tensile	Modulus	ISO 527	9500	6200
Tensile	Strength Break	ISO 527	185	115

Physical property	Condition	Standard	Value	Unit
Density		ISO 1183	1360	kg/m³
Halogen	Content Cl Br I		100	ppm
Melt	Index 275°C 5kg	ISO 1133	35	cm³/10min
Shrinkage			0.26	%
Shrinkage	Flow	ISO 294	0.21	%
Shrinkage	xFlow	ISO 294	0.74	%
Viscosity	Number 0.5% in 96% H2SO4	ISO 307	140	cm³/g
Water	Absorption 23°C Saturation In Water	ISO 62	6.3~6.9	%
Thermal	**Condition**	**Standard**	**Value**	**Unit**
CLE	Flow 23~80°C	ISO 11359	2.2E-5	m/m/K
CLE	xFlow 23~80°C	ISO 11359	1.06E-4	m/m/K
HDT	1.8MPa	ISO 75	210	°C
HDT	0.45MPa	ISO 75	220	°C
Heat	Conductivity Coefficient	DIN 52612	0.36	W/(m·K)
Melting	Temperature DSC	ISO 11357	220	°C
Service	Temperature Short Time	INTERNAL METHOD	200	°C
Service	Temperature 5000hr	IEC 60216	165	°C
Service	Temperature 20000hr	IEC 60216	135	°C
Specific	Heat	INTERNAL METHOD	1500	J/(kg·K)
UL	**Condition**	**Standard**	**Value**	**Unit**
Arc	Resistance	ASTM D495	5	PLC
Comparative	Tracking Index	IEC 60112	1	PLC
Dielectric	Strength	ASTM D149	21	KV/mm
Dimensional	Stability	UL746	0.0	%
HAI	ALL 1.5mm	UL 746A	0	PLC
HAI	ALL 3.0mm	UL 746A	0	PLC
HAI	ALL 6.0mm	UL 746A	0	PLC
HVTR		UL 746A	1	PLC
HWI	ALL 1.5mm	UL 746A	3	PLC
HWI	ALL 3.0mm	UL 746A	0	PLC
HWI	ALL 6.0mm	UL 746A	0	PLC
RTI	Elec ALL 0.75mm	UL 746B	120	°C
RTI	Elec ALL 1.5mm	UL 746B	120	°C
RTI	Imp ALL 1.5mm	UL 746B	95	°C
RTI	Str ALL 1.5mm	UL 746B	130	°C
RTI	Elec ALL 3.0mm	UL 746B	120	°C
RTI	Imp ALL 3.0mm	UL 746B	95	°C
RTI	Str ALL 3.0mm	UL 746B	130	°C
RTI	Elec ALL 6.0mm	UL 746B	120	°C
RTI	Imp ALL 6.0mm	UL 746B	95	°C
RTI	Str ALL 6.0mm	UL 746B	130	°C

UL	FlameRating	ALL 1.5mm	UL94	HB	
UL	FlameRating	ALL 3.0mm	UL94	HB	
UL	FlameRating	ALL 6.0mm	UL94	HB	
Volume	Resistivity		ASTM D257	1.0E11	Ω.cm