

# NAN YA FR-PBT MATERIAL SPECIFICATION

GRADE : 1403G6 GNC6-- Flame Retarded, 30%Glass Fiber Reinforced PBT

PROPERTIES	TEST METHOD	UNIT	REF. VALUE
<b>1. Physical</b>			
Tensile Strength at Yield	ASTM D-638	kg/cm <sup>2</sup>	1250
Elongation	ASTM D-638	%	2.3
Flexural Strength	ASTM D-790	kg/cm <sup>2</sup>	1800
Flexural Modulus	ASTM D-790	kg/cm <sup>2</sup>	85000
IZOD Impact (Notched 1/8")	ASTM D-256	kg-cm/cm	8.6
Rockwell Hardness	ASTM D-785	R-Scale	120
<b>2. Thermal</b>			
Melting Point	DSC		224
H.D.T.( 18.6 kg/cm <sup>2</sup> )	ASTM D-648		207
Melting Flow Index (MFI)	ASTM D-1238	g/10 min	25
<b>3. Electrical</b>			
Volume Resistivity	ASTM D-257	cm	10 <sup>16</sup>
Dielectric Strength	ASTM D-149	kv/mm	20
Dielectric Constant(10 <sup>6</sup> HZ)	ASTM D-150	--	3.0
Dissipation Factor(10 <sup>6</sup> HZ)	ASTM D-150	--	0.01
Arc Resistance	ASTM D-495	sec.	70
<b>4. Others</b>			
Specific Gravity	ASTM D-792	--	1.61
Mold Shrinkage (MD)	3 mmt	%	0.2~0.3
Mold Shrinkage (TD)	3 mmt	%	0.6~1.2
Flammability	UL 94	--	V0
Remarks	UL FILE NO. :E130155(M)		

REFERENCE MOLDING CONDITIONS		
Drying Time	Hrs	4
Drying Temp.		140
Cylinder Temp.	Rear	250
	Center	260
	Front	265
Nozzle Temp.		270
Mold Temp.		85
Injection Pressure	kg/cm <sup>2</sup>	450-850
Screw Rotation speed	rpm	160
Injection Speed	--	fast

Injection M/C : ENGEL ES 50/150 2 oz
Mold : ASTM Test Bar
Gate Size: 5.8mm×1.2mm
Test Bar Thickness : 3.2mm
Test Condition: 23 , 50%RH

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Melting Flow Index Test Condition: 250 ×2.16Kg

The values in this table are for reference only.

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