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GTM-PBT30FG-V05VA**Polybutylene Terephthalate Compound (PBT)**

Description	PBT resin 30% glass fiber reinforced, heat stabilized, Flame retardant and UL94 V0/5VA classification
Color	Black
Markets	Automotive, furniture and general purpose
Applications	
UL File Number:	: E524225
Certifications	
Approvals	
Processing Technology	Injection

Physical Properties	Values	Unit	ISO	ASTM D
Density	1.6	g/cm³	1183	792
Filler Content	30	%	3451	5630
Mould Shrinkage	-	%	294-4	
Melt Flow Index 250°C/2.16 kg	8	g/10min	1133	1238
Melting Point (DSC)	-	°C	3146	3418
Water absorption at saturation (Immersion in H ₂ O at 23 °C)	-	%	62	570
Moisture absorption at equilibrium (50% RH, 23°C)	-	%	62	570
Mechanical Properties	Values	Unit	ISO	ASTM D
Tensile strength at yield	97	MPa	527-1	638
Tensile strength at break	3.5	MPa	527-1	638
Tensile elongation at break	-	%	527-1	638
Tensile Modulus	-	MPa	527-1	638
Flexural Strength at yield	-	MPa	178	790
Flexural Modulus	8,700	MPa	178	790
IZOD Impact strength, notched (23°C)		lb-ft/in2	-	256
IZOD Impact strength, notched (23°C)	6.1	KJ/m2	180 1eA	-
Charpy Impact strength, notched (23°C)	-	KJ/m2	179 1eA	-
Charpy Impact strength, unnotched (23°C)	-	KJ/m2	179 1eU	-
Thermal Properties	Values	Unit	ISO	ASTM D
Vicat A (50°C/h, 10 N)	-	°C	306	1525
Vicat B (50°C/h, 50 N)	-	°C	306	1525
HDT method A (1.820 MPa)	204	°C	75-2	648
HDT method B (0.450 MPa)	-	°C	75-1	648
Flammability	Values			
Flame rating at 1.5 mm	V0		IEC 60695-11-10	
Flame rating at 2.5 mm	V0/5VA		IEC 60695-11-10	
Flame rating at 3.0 mm	V0/5VA		IEC 60695-11-10	
Processing Conditions	Values			
Drying	2h/80°C	-	-	-
1st Zone	230°C	-	-	-
2nd Zone	250°C	-	-	-
3rd Zone	260°C	-	-	-
Mold	40-90°C	-	-	-

Notes: The values are to be considered typical and do not constitute a specification.**Test Temperature:** 23°C, unless otherwise stated**Storage, transportation and handling:**

Storage and handling of the resin should consider protecting it from direct sunlight, temperatures above 40°C, and ambient humidity. Exposure to any of these conditions will reduce the resin's storage time.

Transport and handling equipment must be designed and equipped with the necessary measures to prevent the creation and accumulation of fine particles and dust originating from or contained in the resin. Under certain circumstances, these particles can pose a hazardous risk.

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