

POKETONE® M13FG9A

General

Feature	50% glass-reinforced high flow injection molding grade with Food/Drinking water Compliance
Special Characteristics	Non-toxic, Low GWP
Processing method	Injection molding
Certification	FDA, WRAS, RoHs, Free of PAHs, Free of Halogen, SVHC
Colors available	Natural
UL File number	-
Form	Pellet
Applications	

Physical Properties

	ASTM	Value	ISO	Value
Density	D792	1.68 g/cm ³	1183	1.68 g/cm ³
Shore D hardness	D2240		868	
Hardness Rockwell	D785		2039	
Water absorption equilibrium at RH 50%	D570		62	
Water absorption at Saturation	D570		62	
Melt flow index 240°C/2.16kg	D1238	25 g/10 min	1133	
Mold Shrinkage	D955		294-4	
	MD, 3 mm			
	TD, 3 mm			
	MD, 2 mm			
	TD, 2 mm			

Mechanical Properties

	ASTM	Value	ISO	Value
Tensile strength at yield	D638	165 MPa	527-1	
Tensile modulus	D638		527-1	
Tensile elongation at yield	D638		527-1	
Tensile elongation at break	D638	2.0 %	527-1	
Flexural strength	D790	214 MPa	178	
Flexural modulus	D790	11,800 MPa	178	
Unnotched Izod impact strength	D256		180/1U	
Notched Izod impact strength	D256		180/1A	
Unnotched Charpy impact strength	D6110		179/1eU	

Notched Charpy impact strength	D6110	179/1eA	11 kJ/m ²
Falling dart impact strength		6603-2	

Thermal Properties

	ASTM	Value	ISO	Value
Melting temperature	D3418	222 °C	11357	222 °C
Coefficient of linear thermal expansion, 25 ~ 55°C	E831		11359	
Vicat softening point	D1525		306/B50	
	5 kg		50 N	
	D648		75	
Heat deflection temperature	66 psi	215 °C	0.45 MPa	
	264 psi	210 °C	1.8 MPa	

Injection Molding Processing Conditions

		Value
Pre-drying	Drying temperature	80 °C
	Drying time	3 ~ 4 hr
	Suggested max moisture	0.20 %
Temperature	Nozzle temperature	240 °C
	Zone 1 temperature	230 °C
	Zone 2 temperature	220 °C
	Zone 3 temperature	215 °C
	Zone 4 temperature	210 °C
	Processing temperature	225 ~ 240 °C
	Mold temperature	80 ~ 120 °C
Pressure	Back pressure	0.294 ~ 0.686 MPa
Speed	Screw Speed	50 ~ 100 rpm

* The data listed here is not for specification warranty, but typical value.

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