

POKETONE® M41FG6A

General

Feature	30% glass-reinforced enhanced aesthetics injection molding grade
Special Characteristics	Low GWP, High impact
Processing method	Injection molding
Certification	FDA, ISO10993
Colors available	Natural
UL File number	-
Form	Pellet
Applications	-

Physical Properties

	ASTM	Value	ISO	Value
Density	D792	1.45 g/cm ³	1183	1.45 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 220°C/2.16kg	D1238	11 g/10 min	1133	
	D955		294-4	
Mold Shrinkage	MD, 3 mm			
	TD, 3 mm			
	MD, 2 mm			
	TD, 2 mm			

Mechanical Properties

	ASTM	Value	ISO	Value
Tensile strength at yield	D638	118 MPa	527-1	
Tensile modulus	D638		527-1	
Tensile elongation at yield	D638		527-1	
Tensile elongation at break	D638	3.9 %	527-1	
Flexural strength	D790	179 MPa	178	
Flexural modulus	D790	6,700 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	13.6 kJ/m ²

Falling dart impact strength	6603-2
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Thermal Properties

	ASTM	Value	ISO	Value
Melting temperature	D3418	200 °C	11357	200 °C
Coefficient of linear thermal expansion, 25 ~ 55°C	E831		11359	
Vicat softening point	D1525		306/B50	
	5 kg		50 N	
Heat deflection temperature	D648		75	
	66 psi		0.45 MPa	
	264 psi		1.8 MPa	

Injection Molding Processing Conditions

		Value	Unit
Pre-drying	Drying temperature	80	°C
	Drying time	3 ~ 4	hr
	Suggested max moisture	0.20	%
Temperature	Nozzle temperature	225	°C
	Zone 1 temperature	220	°C
	Zone 2 temperature	215	°C
	Zone 3 temperature	215	°C
	Zone 4 temperature	210	°C
	Processing temperature	210 ~ 220	°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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