

# POKETONE® M13FG8H

## Description

40% glass-reinforced high-flow injection molding grade

Physical Properties	ASTM	Value	ISO	Value
Density	D792	1.48 g/cm <sup>3</sup>	1183	1.48 g/cm <sup>3</sup>
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	8 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	112 MPa	527-1	
Tensile modulus	D638		527-1	
Tensile elongation at yield	D638		527-1	
Tensile elongation at break	D638	4.3 %	527-1	
Flexural strength	D790	176 MPa	178	
Flexural modulus	D790	7,300 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	10.3 kJ/m <sup>2</sup>
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	
Heat deflection temperature	D648		75	
	66 psi		0.45 MPa	
	264 psi		1.8 MPa	

Flammability Properties	Test Method & Condition	Value
Flame resistance	UL 94	V-0 (0.8 mm)

Electrical Properties	Test Method & Condition	Value
Dielectric Strength (DS)	ASTM D149	
Volume Resistivity (VR)	ASTM D257	
Surface Resistivity (SR)	ASTM D257	
Dielectric constant at 60Hz	ASTM D150	
Dissipation factor at 60Hz	ASTM D150	

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	60 ~ 80 °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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