

POKETONE® M13FH2Y

General

Feature	Flame retarded, 30% Glass-reinforced high-flow injection molding grade
Special Characteristics	Low Smoke Density, Low Toxicity, Free of Halogen
Processing method	Injection molding
Certification	UL-94(0.8mm V-0), UL-746A, Free of Halogen
Colors available	Natural
UL File number	E163907
Form	Pellet
Applications	-

Physical Properties

	ASTM	Value	ISO	Value
Density	D792	1.67 g/cm ³	1183	1.67 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	17 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	96 MPa	527-1	
Tensile modulus	D638	10,000 MPa	527-1	
Tensile elongation at yield	D638	3.2 %	527-1	
Tensile elongation at break	D638	3.3 %	527-1	
Flexural strength	D790	130 MPa	178	
Flexural modulus	D790	8,200 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	7.5 kJ/m ²

Falling dart impact strength	6603-2
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Thermal Properties	ASTM	Value	ISO	Value
Melting temperature	D3418	220 °C	11357	220 °C
Coefficient of linear thermal expansion, 25 ~ 55°C	E831 TD MD	5	11359	
Vicat softening point	D1525 5 kg		306/B50 50 N	
Heat deflection temperature	D648 66 psi 264 psi		75 0.45 MPa 1.8 MPa	

Flammability Properties	Test Method & Condition	Value
Flame resistance	UL 94	V-0 (0.8 mm)
Glow Wire Ignition Temperature (GWIT)	IEC 60695-2-13	
Glow Wire Flammability Index (GWFI)	IEC 60695-2-12	

Electrical Properties	Test Method & Condition	Value
Dielectric Strength (DS)	ASTM D149	29 kV/mm
Volume Resistivity (VR)	ASTM D257	10 ¹¹ Ω-cm
Surface Resistivity (SR)	ASTM D257	
Dielectric constant at 60Hz	ASTM D150	
Dissipation factor at 60Hz	ASTM D150	
Hot Wire Ignition (HWI)	UL 746A	PLC 2
High Amp Arc Ignition (HAI)	UL 746A	PLC 0
High Volt arc Track Rate (HVTR)	UL 746A	PLC 0
High voltage, low current Arc Resistance (AR)	ASTM D495	PLC 5
Comparative Tracking Index (CTI)	ASTM D3638	PLC 2

Injection Molding Processing Conditions	Value
Pre-drying	Drying temperature 80 °C
	Drying time 3 ~ 4 hr

Temperature	Suggested max moisture	0.20 %
	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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