

POKETONE® M730F

General

Feature	General-purpose injection molding grade
Special Characteristics	Non-toxic, Low GWP
Processing method	Extrusion/injection
Certification	FDA, KFDA, NSF51, EU No.10/2011, GMC Resolution 02/12 & 32/07, NSF61, KTW, WRAS, USP Class VI, ISO 10993, EN71-Part3, RoHs, Free of PAHs, Free of Halogen, SVHC, CP65
Colors available	Natural
UL File number	-
Form	Pellet
Applications	Food conveyer

Physical Properties

	ASTM	Value	ISO	Value
Density	D792	1.24 g/cm ³	1183	1.24 g/cm ³
Shore D hardness	D2240		868	78
Hardness Rockwell	D785	105	2039	
Water absorption equilibrium at RH 50%	D570	0.5 %	62	0.5 %
Water absorption at Saturation	D570	2.1 %	62	2.1 %
Melt flow index 240°C/2.16kg	D1238	3 g/10 min	1133	2.8 ml/10 min
Mold Shrinkage	D955		294-4	
	MD, 3 mm	2.2 %		
	TD, 3 mm	2.1 %		
	MD, 2 mm			
	TD, 2 mm			

Mechanical Properties

	ASTM	Value	ISO	Value
Tensile strength at yield	D638	56 MPa	527-1	56 MPa
Tensile modulus	D638	1,400 MPa	527-1	1,300 MPa
Tensile elongation at yield	D638	24 %	527-1	24 %
Tensile elongation at break	D638	≥ 200 %	527-1	≥ 200 %
Flexural strength	D790	50 MPa	178	50 MPa
Flexural modulus	D790	1,250 MPa	178	1,200 MPa
Unnotched Izod impact strength	D256	N.B.	180/1U	N.B.
Notched Izod impact strength	D256		180/1A	

	23 °C	240 J/m	23 °C	20 kJ/m ²
	-30 °C	52 J/m	-30 °C	4 kJ/m ²
Unnotched Charpy impact strength	D6110		179/1eU	N.B.
Notched Charpy impact strength	D6110		179/1eA	
			23 °C	19 kJ/m ²
			-30 °C	4 kJ/m ²
Falling dart impact strength			6603-2	
			23 °C	

Thermal Properties	ASTM	Value	ISO	Value
Melting temperature	D3418	222 °C	11357	222 °C
Coefficient of linear thermal expansion	E831 TD MD	9.4×10 ⁻⁵ 1.0×10 ⁻⁴	11359	
Vicat softening point	D1525 5 kg	190 °C	306/B50 50 N	190 °C
Heat deflection temperature	D648 66 psi 264 psi	190 °C 90 °C	75 0.45 MPa 1.8 MPa	185 °C 80 °C

Flammability Properties	Test Method & Condition	Value
Flame resistance	UL 94	HB (0.8 mm)

Electrical Properties	Test Method & Condition	Value
	ASTM D149	
Dielectric Strength (DS)	3 mm 2 mm	16 kV/mm 20 kV/mm
Volume Resistivity (VR)	ASTM D257	10 ¹⁴ Ω-cm
Surface Resistivity (SR)	ASTM D257	10 ¹⁷ Ω/m ²
Dielectric constant at 60Hz	ASTM D150	6.2
Dissipation factor at 60Hz	ASTM D150	0.014

Injection Molding Processing Conditions	Value
Pre-drying Drying temperature	80 °C

Temperature	Drying time	3 ~ 4 hr
	Suggested max moisture	0.20 %
	Nozzle temperature	250 °C
	Zone 1 temperature	240 °C
	Zone 2 temperature	230 °C
	Zone 3 temperature	225 °C
	Zone 4 temperature	220 °C
	Processing temperature	235 ~ 250 °C
	Mold temperature	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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