

POKETONE® M640A

Description

Thermal resistant(high HDT) extrusion/injection molding grade

Physical Properties	ASTM	Value	ISO	Value
Density	D792	1.24 g/cm ³	1183	1.24 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 255°C/2.16kg	D1238	6 g/10 min	1133	
	D955		294-4	
Mold Shrinkage	MD, 3 mm	1.9 %		
	TD, 3 mm	1.9 %		
	MD, 2 mm			
	TD, 2 mm			

Mechanical Properties	ASTM	Value	ISO	Value
Tensile strength at yield	D638	67 MPa	527-1	
Tensile modulus	D638		527-1	
Tensile elongation at yield	D638		527-1	
Tensile elongation at break	D638	≥ 200 %	527-1	≥ 200 %
Flexural strength	D790	54 MPa	178	
Flexural modulus	D790	1,500 MPa	178	
Unnotched Izod impact strength	D256		180/1U	
Notched Izod impact strength	D256		180/1A	
	23 °C	300 J/m	23 °C	22 kJ/m ²
	-30 °C	70 J/m	-30 °C	6 kJ/m ²
Unnotched Charpy impact strength	D6110		179/1eU	
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	

Thermal Properties	ASTM	Value	ISO	Value
Melting temperature	D3418	235 °C	11357	235 °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	215 °C	0.45 MPa	218 °C
	264 psi	130 °C	1.8 MPa	130 °C

Flammability Properties

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

Injection Molding Processing Conditions

		Value
Pre-drying	Drying temperature	80 °C
	Drying time	3 ~ 4 hr
	Suggested max moisture	0.20 %
Temperature	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
Pressure	Mold temperature	60 ~ 80 °C
	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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