

POKETONE M640A

Hyosung Chemical Corporation - Polyketone, Aliphatic

General Information

Product Description

Thermal resistant(high HDT) extrusion/injection molding grade

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Features	• Good Heat Resistance
RoHS Compliance	• RoHS Compliant
Processing Method	• Extrusion • Injection Molding

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.24		ASTM D792
Density	1.24	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (255°C/2.16 kg)	6.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.118 in)	0.019	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.118 in)	0.019	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	9720	psi	ASTM D638
Tensile Elongation (Break)	> 200	%	ASTM D638
Tensile Strain (Break)	> 200	%	ISO 527-2
Flexural Modulus	218000	psi	ASTM D790
Flexural Strength	7830	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	1.9	ft·lb/in ²	
73°F	9.0	ft·lb/in ²	
Notched Izod Impact			ASTM D256
-22°F	1.3	ft·lb/in	
73°F	5.6	ft·lb/in	
Notched Izod Impact Strength			ISO 180/1A
-22°F	2.9	ft·lb/in ²	
73°F	10	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	419	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Unannealed)	424	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	266	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	266	°F	ISO 75-2/A
Melting Temperature	455	°F	ISO 11357-3
Melting Temperature	455	°F	ASTM D3418
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.031 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.20	%
Rear Temperature	428	°F



Middle Temperature	437 to 446 °F
Front Temperature	464 °F
Nozzle Temperature	482 °F
Processing (Melt) Temp	455 to 482 °F
Mold Temperature	140 to 176 °F
Back Pressure	42.6 to 99.5 psi
Screw Speed	50 to 100 rpm

Notes

¹ Typical properties: these are not to be construed as specifications.

