POKETONE M410F-S

Hyosung Chemical Corporation - *Polyketone, Aliphatic*

General Information

Product Description			
Medium-flow injection molding grade (Food & Water Contact) Monofilament extrusion grade			
General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Features	• Drinking Water Contact Acceptable	• Food Contact Acceptable	• Medium Flow
Uses	• Monofilaments		
Agency Ratings	• ACS • FDA FCN 1847 • ISO 10993	• KTW • NSF STD-51 • NSF STD-61	• USP Class VI
RoHS Compliance	• RoHS Compliant		
Processing Method	• Extrusion	• Injection Molding	

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.22		ASTM D792
Density	1.22	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/2.16 kg)	35	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.118 in)	0.017	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.118 in)	0.017	in/in	ASTM D955
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Yield)	6530	psi	ASTM D638
Tensile Elongation (Break)	> 200	%	ASTM D638
Tensile Strain (Break)	> 200	%	ISO 527-2
Flexural Modulus	145000	psi	ASTM D790
Flexural Strength	6530	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength	3.3	ft·lb/in²	ISO 179/1eA
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	311	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	162	°F	ASTM D648
Melting Temperature	387	°F	ISO 11357-3
Melting Temperature	387	°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	410	°F
Middle Temperature	419	°F
Front Temperature	428	°F
Nozzle Temperature	437	°F
Processing (Melt) Temp	410 to 428	°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.