

POKETONE M33AF1Y

Hyosung Chemical Corporation - Polyketone, Aliphatic

General Information
Product Description

Flame retarded (0.4mm V-0), high-flow injection molding grade

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Features	• Flame Retardant • High Flow
Agency Ratings	• ISO 10993
RoHS Compliance	• RoHS Compliant
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.25		ASTM D792
Density	1.25	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (240°C/2.16 kg)	35	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (240°C/2.16 kg)	28	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.118 in)	0.013	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.118 in)	0.014	in/in	ASTM D955
Water Absorption (Saturation)	2.0	%	ASTM D570
Water Absorption (Saturation, 73°F)	2.0	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.50	%	ASTM D570
Water Absorption (Equilibrium, 73°F, 50% RH)	0.50	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	6670	psi	ASTM D638
Tensile Elongation (Break)	35	%	ASTM D638
Flexural Modulus	276000	psi	ASTM D790
Flexural Strength	9430	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	2.1	ft·lb/in ²	ISO 179/1eA
Notched Izod Impact	0.84	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	374	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Unannealed)	365	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	230	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	194	°F	ISO 75-2/A
Vicat Softening Temperature	365	°F	ASTM D1525 ²
Vicat Softening Temperature	365	°F	ISO 306/B50
Melting Temperature	432	°F	ISO 11357-3
Melting Temperature	432	°F	ASTM D3418
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+18	ohms	ASTM D257
Volume Resistivity	1.0E+13	ohms·cm	ASTM D257
Arc Resistance	PLC 5		ASTM D495
Comparative Tracking Index (CTI)	PLC 0		UL 746A
High Amp Arc Ignition (HAI)	PLC 0		UL 746A
Hot-wire Ignition (HWI)	PLC 1		UL 746A
Flammability	Nominal Value	Unit	Test Method



Flame Rating (0.016 in)	V-0	UL 94
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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 to 428	°F
Front Temperature	446	°F
Nozzle Temperature	464	°F
Processing (Melt) Temp	437 to 464	°F
Mold Temperature	140 to 176	°F
Back Pressure	42.7 to 99.6	psi
Screw Speed	50 to 100	rpm

Notes

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

² Loading 2 (50 N)

