

POKETONE M33AA2Y

Hyosung Chemical Corporation - Polyketone, Aliphatic

General Information

Product Description

Flame retarded (0.8mm V-0), 30% glass-reinforced medium-flow injection molding grade

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Features	• Flame Retardant • Medium Flow
Agency Ratings	• ISO 10993
RoHS Compliance	• RoHS Compliant
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.48		ASTM D792
Density	1.48	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (240°C/2.16 kg)	8.0	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (240°C/2.16 kg)	5.4	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.0787 in)	4.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.0787 in)	0.010	in/in	ASTM D955
Water Absorption (Saturation)	1.7	%	ASTM D570
Water Absorption (Saturation, 73°F)	1.7	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.40	%	ASTM D570
Water Absorption (Equilibrium, 73°F, 50% RH)	0.40	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	16200	psi	ASTM D638
Tensile Elongation (Break)	4.3	%	ASTM D638
Flexural Modulus	1.06E+6	psi	ASTM D790
Flexural Strength	25500	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	4.9	ft·lb/in ²	ISO 179/1eA
Notched Izod Impact	2.4	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	428	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Unannealed)	428	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	419	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	419	°F	ISO 75-2/A
Vicat Softening Temperature	410	°F	ASTM D1525 ²
Vicat Softening Temperature	410	°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
Dielectric Strength	970	V/mil	ASTM D149
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
Flame Rating (0.031 in)	V-0	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 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)

