POKETONE™
HYOSUNG POLYKETONE

POKETONE® M93FB5Y

Description

Flame retarded (1.6mm V-0), 30% glass-reinforced high-flow injection molding grade

Physical Properties	ASTM	Value	ISO	Value
Density	D792	1.48 g/cm^3	1183	1.48 g/cm^3
Shore D hardness	D2240		868	
Hardness Rockwell	D785		2039	
Water absorption equilibrium at RH 50%	D570	0.4 %	62	0.4 %
Water absorption at Saturation	D570	1.7 %	62	1.7 %
Melt flow index 240°C/2.16kg	D1238	33 g/10 min	1133	
Mold Shrinkage	D955 MD, 3 mm TD, 3 mm		294-4	
	MD, 2 mm TD, 2 mm	0.4 % 1.0 %		
	MD, 1 mm TD, 1 mm			

Mechanical Properties	ASTM	Value	ISO	Value
Tensile strength at yield	D638	115 MPa	527-1	
Tensile modulus	D638		527-1	
Tensile elongation at yield	D638		527-1	
Tensile elongation at break	D638	3.5 %	527-1	
Flexural strength	D790	180 MPa	178	
Flexural modulus	D790	7,700 MPa	178	
Notched Izod impact strength	D256	95 J/m	180/1A	
Notched Charpy impact strength	D6110		179/1eA	9.5 kJ/m^2

Thermal Properties	ASTM	Value	ISO	Value
Melting temperature	D3418	222 °C	11357	222 °C
Coefficient of linear thermal expansion, 25°C to 55°C	E831		11359	
Vicat softening point	D1525 5 kg	210 °C	306/B50 50 N	210 °C
Heat deflection temperature	D648 66 psi 264 psi	 220 °C 215 °C	75 0.45 MPa 1.8 MPa	 220 °C 215 °C

HYOSUNG CHEMICAL

POKETONE™
HYOSUNG POLYKETONE

Flammability Properties	Test Method & Condition	Value
Flame resistance	UL 94	V-0 (1.6 mm)
Glow Wire Ignition Temperature (GWIT)	IEC 60695-2-13	
Glow Wire Flammability Index (GWFI)	IEC 60695-2-12	

Electrical Properties	Test Method & Condition	Value
Dielectric Strength (DS)	ASTM D149	
Volume Resistivity (VR)	ASTM D257	10^{12} Ω-cm
Surface Resistivity (SR)	ASTM D257	10^{17} Ω/m^2
Dielectric constant at 60Hz	ASTM D150	
Dissipation factor at 60Hz	ASTM D150	
Hot Wire Ignition (HWI)	UL 746A	PLC 1
High Amp Arc Ignition (HAI)	UL 746A	PLC 0
High Volt arc Track Rate (HVTR)	UL 746A	
High voltage, low current Arc Resistance (AR)	ASTM D495	PLC 5
Comparative Tracking Index (CTI)	ASTM D3638	PLC 0

Injection Molding Processing Conditions		Value
Pre-drying	Drying temperature	80 °C
	Drying time	3 ~ 4 hr
	Suggested max moisture	0.20 %
Temperature	Nozzle temperature	240 °C
	Zone 1 temperature	230 °C
	Zone 2 temperature	220 °C
	Zone 3 temperature	215 °C
	Zone 4 temperature	210 °C
	Processing temperature	225 ~ 240 °C
	Mold temperature	60 ~ 80 °C
Pressure	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.

HYOSUNG CHEMICAL