POKETONE™
HYOSUNG POLYKETONE

POKETONE® M93FC1G

Description

Conductive injection molding grade

Physical Properties	ASTM	Value	ISO	Value
Density	D792	1.34 g/cm^3	1183	
Shore D hardness	D2240		868	
Hardness Rockwell	D785		2039	
Water absorption equilibrium at RH 50%	D570		62	
Water absorption at Saturation	D570		62	
Melt flow index 240°C/2.16kg	D1238	4.4 g/10 min	1133	
Mold Shrinkage	D955 MD, 3 mm TD, 3 mm MD, 2 mm TD, 2 mm		294-4	

Mechanical Properties	ASTM	Value	ISO	Value
Tensile strength at yield	D638	101 MPa	527-1	101 MPa
Tensile modulus	D638		527-1	
Tensile elongation at yield	D638		527-1	
Tensile elongation at break	D638	3.2 %	527-1	3.2 %
Flexural strength	D790	147 MPa	178	147 MPa
Flexural modulus	D790	5,360 MPa	178	5,360 MPa
Unnotched Izod impact strength	D256		180/1U	
Notched Izod impact strength	D256		180/1A	
Unnotched Charpy impact strength	D6110		179/1eU	
Notched Charpy impact strength	D6110	8.5 kJ/m^2	179/1eA	8.5 kJ/m^2
Falling dart impact strength			6603-2	

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

HYOSUNG CHEMICAL

POKETONE™
HYOSUNG POLYKETONE

Electrical Properties	Test Method & Condition	Value
Dielectric Strength (DS)	ASTM D149	
Volume Resistivity (VR)	ASTM D257	
Surface Resistivity (SR)	ASTM D257	$10^{4\text{-}6}$ Ω/m^2
Dielectric constant at 60Hz	ASTM D150	
Dissipation factor at 60Hz	ASTM D150	

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