

KEPITAL® F20-51U

POM

Korea Engineering Plastics Co. Ltd.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	10.5	g/10min	ISO 1133
Molding shrinkage, parallel	2.0	%	ISO 294-4, 2577
ASTM Data			
Melt Flow Index, MFI	9	g/10min	ASTM D 1238
Temperature	190	°C	-
Load	2.16	kg	-
Mold Shrinkage, MD	0.02	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Strength	55	MPa	ISO 527
Yield strain	10	%	ISO 527
Strain at break	40	%	ISO 527
Flexural modulus, 23°C	2250	MPa	ISO 178
Charpy notched impact strength, +23°C	8.5	kJ/m ²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
ISO Data			
Melting temperature, 10°C/min	165	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	89	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	130	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	HB	class	IEC 60695-11-10

Electrical properties	Value	Unit	Test Standard
ISO Data			
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Electric strength	19	kV/mm	IEC 60243-1

Other properties	Value	Unit	Test Standard
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1380	kg/m ³	ISO 1183
Density	1390	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80 - 100	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.1	%	-
Mold temperature	60 - 80	°C	-
Feed temperature	170 - 180	°C	-
Zone 1	180 - 190	°C	-
Zone 2	190 - 200	°C	-
Nozzle temperature	180 - 210	°C	-
Back pressure	2	MPa	-

Characteristics**Processing**

Injection Molding

Delivery form

Black

Special Characteristics

High impact or impact modified, U.V. stabilized or stable to weather

Applications

Automotive

Regional Availability

North America, Europe, Asia Pacific