

KINGFAABS

Physical Properties

Property	Typical Value	Unit	Test Method	Test Condition
Density	1.05	g/cm ³	ISO 1183-1	23 °C
Melt Mass-Flow Rate (MFR)	2	g/10 min	ISO 1133-1	200 °C, 5 kg
Melt Mass-Flow Rate (MFR)	20	g/10 min	ISO 1133-1	220 °C, 10 kg
Mold Shrinkage	0.4–0.7	%	ISO 2577	23 °C

Mechanical Properties

Property	Typical Value	Unit	Test Method	Test Condition
Tensile Strength	47	MPa	ISO 527-2	50 mm/min
Tensile Strain at Break	8	%	ISO 527-2	50 mm/min
Flexural Strength	76	MPa	ISO 178	2 mm/min
Flexural Modulus	2500	MPa	ISO 178	2 mm/min
Notched Izod Impact Strength	20	kJ/m ²	ISO 180	23 °C
Rockwell Hardness	108	R scale	ISO 2039-2	—

Thermal Properties

Property	Typical Value	Unit	Test Method	Test Condition
Heat Deflection Temperature (HDT)	85	°C	ISO 75-2	0.45 MPa
Heat Deflection Temperature (HDT)	77	°C	ISO 75-2	1.8 MPa
Vicat Softening Temperature	96	°C	ISO 306	1 kg, 120 °C/h
Vicat Softening Temperature	86	°C	ISO 306	5 kg, 50 °C/h

Electrical Properties

Property	Typical Value	Unit	Test Method
Volume Resistivity	10 ¹⁴	Ω·cm	IEC 60093
Dielectric Strength	22	kV/mm	IEC 60243-1

Flame Retardancy

Property	Typical Value	Test Method	Test Condition
Flammability Rating	HB	UL 94	1.6 mm

Typical Processing Conditions (Reference)

Parameter	Optimum	Range
Melt Temperature	215 °C	200–230 °C
Barrel Temperature — Rear	190 °C	180–200 °C
Barrel Temperature — Center	200 °C	190–210 °C

Barrel Temperature — Front	210 °C	195–220 °C
Mold Temperature	50 °C	30–60 °C
Maximum Processing Temperature	250 °C	—
Injection Speed	Slow to moderate	—
Back Pressure	0–1000 kPa	—
Pre-drying	80–90 °C, 2–4 h	—

1.This data are provided for general reference only.

2.The typical values listed above are for reference only. During actual processing, process parameters should be adjusted accordingly based on mold design, product geometry, and dimensions.