

IUPIACE GN20
(PPE+PS)-GF20

Mitsubishi Engineering-Plastics Corporation

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	5	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	2.16	kg	-
Molding shrinkage, parallel	0.2	%	ISO 294-4, 2577
Molding shrinkage, normal	0.3	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	6700	MPa	ISO 527
Stress at break	99	MPa	ISO 527
Strain at break	2.5	%	ISO 527
Flexural modulus, 23°C	6200	MPa	ISO 178
Flexural strength	160	MPa	ISO 178
Charpy notched impact strength, +23°C	7	kJ/m ²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	130	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	135	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	30	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	68	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-
Burning behav. at thickness h	V-1	class	IEC 60695-11-10
Thickness tested	0.8	mm	-
Yellow Card available	yes	-	-
Burning behav. 5V at thickness h	5VA	class	IEC 60695-11-20
Thickness tested	2.0	mm	-
Yellow Card available	yes	-	-

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	3.4	-	IEC 62631-2-1
Relative permittivity, 1MHz	3.3	-	IEC 62631-2-1
Dissipation factor, 100Hz	45	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	55	E-4	IEC 62631-2-1
Volume resistivity	3E14	Ohm*m	IEC 62631-3-1
Surface resistivity	2E15	Ohm	IEC 62631-3-2
Electric strength	25	kV/mm	IEC 60243-1
Comparative tracking index	225	-	IEC 60112

Other properties	Value	Unit	Test Standard
Water absorption	0.06	%	Sim. to ISO 62
Density	1240	kg/m ³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	100 - 120	°C	-
Pre-drying - Time	2 - 4	h	-
Mold temperature	90 - 125	°C	-
Zone 1	260 - 290	°C	-
Zone 2	280 - 310	°C	-
Zone 3	280 - 310	°C	-
Nozzle temperature	270 - 310	°C	-
Screw speed	60 - 150	rpm	-
Injection pressure	20 - 150	MPa	-

Characteristics

Processing

Injection Molding

Special Characteristics

Flame retardant

Applications

Automotive, Electrical and Electronical, General Purpose

Regional Availability

North America, Europe, Asia Pacific, South and Central America,
Near East/Africa