

DENKA GR-0500

ABS

Denka Company Limited

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	21	g/10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-
Molding shrinkage, parallel	0.5	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	3050	MPa	ISO 527
Yield stress	61	MPa	ISO 527
Stress at break	44	MPa	ISO 527
Flexural modulus, 23°C	3000	MPa	ISO 178
Flexural strength	98	MPa	ISO 178
Charpy notched impact strength, +23°C	4	kJ/m ²	ISO 179/1eA
Rockwell hardness	R 118	-	ISO 2039-2
ASTM Data			
Flexural Modulus	2900	MPa	ASTM D 790
Flexural Strength	91	MPa	ASTM D 790
Rockwell Hardness	R 121	-	ASTM D 785
Izod Impact notched, 1/8 in	59	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	83	°C	ISO 75-1/-2
Vicat softening temperature, B	107	°C	ISO 306
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Yellow Card available	yes	-	-
ASTM Data			
DTUL @ 264 psi	91	°C	ASTM D 648
Vicat Temperature	105	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Density	1060	kg/m ³	ISO 1183
Density	1050	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80 - 85	°C	-
Pre-drying - Time	2 - 3	h	-
Mold temperature	40 - 60	°C	-
Zone 1	180 - 200	°C	-
Zone 2	190 - 220	°C	-
Zone 3	200 - 240	°C	-
Nozzle temperature	200 - 235	°C	-
Screw speed	80 - 120	rpm	-
Back pressure	0.5 - 1	MPa	-

Characteristics**Processing**

Injection Molding

Regional Availability

North America, Europe, Asia Pacific