DENKA GR-3500

ABS — Denka Company Limited

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	**14**	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	**2200**	MPa	ISO 527
Yield stress	**41**	MPa	ISO 527
Stress at break	**32**	MPa	ISO 527
Flexural modulus, 23°C	**2050**	MPa	ISO 178
Flexural strength	**65**	MPa	ISO 178
Charpy notched impact strength, +23°C	**30**	kJ/m²	ISO 179/1eA
Rockwell hardness	**R 104**	-	ISO 2039-2
ASTM Data			
Flexural Modulus	**2150**	MPa	ASTM D 790
Flexural Strength	**63**	MPa	ASTM D 790
Rockwell Hardness	**R 109**	-	ASTM D 785
Izod Impact notched, 1/8 in	**310**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**76**	°C	ISO 75-1/-2
Vicat softening temperature, B	**95**	°C	ISO 306
Burning behav. at thickness h	**HB**	class	IEC 60695-11-10
Yellow Card available	**yes**	-	-
ASTM Data			
DTUL @ 264 psi	**85**	°C	ASTM D 648
Vicat Temperature	**95**	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Density	**1040**	kg/m³	ISO 1183
Density	**1030**	kg/m³	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	**200 - 230**	°C	-
Zone 3	**210 - 260**	°C	-
Nozzle temperature	**210 - 255**	°C	-
Screw speed	**80 - 120**	rpm	-
Back pressure	**0.5 - 1**	MPa	-

Characteristics

Processing

Injection Molding

Regional Availability

North America, Europe, Asia Pacific

Special Characteristics

High impact or impact modified