

OMNILON® PA6 GR25 HSX NA - PA6

Physical properties	Value	Unit	Test Standard
Density	1300	kg/m ³	ISO 1183

Mechanical properties	Value	Unit	Test Standard
Tensile modulus	9000	MPa	ISO 527-2/1A
Tensile stress at break, 5mm/min	170	MPa	ISO 527-2/1A
Tensile strain at break, 5mm/min	3.8	%	ISO 527-2/1A
Flexural modulus, 23°C	8750	MPa	ISO 178
Flexural strength, 23°C	280	MPa	ISO 178
Charpy notched impact strength, 23°C	12	kJ/m ²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
DTUL at 1.8 MPa	204	°C	ISO 75-1, -2
DTUL at 0.45 MPa	218	°C	ISO 75-1, -2

Typical injection moulding processing conditions

Pre Drying	Value	Unit	Test Standard
Necessary low maximum residual moisture content	0.15	%	-
Drying time	4 - 8	h	-
Drying temperature	80 - 90	°C	-
Temperature	Value	Unit	Test Standard
Zone1 temperature	220 - 230	°C	-
Zone2 temperature	225 - 235	°C	-
Zone3 temperature	235 - 245	°C	-
Zone4 temperature	245 - 255	°C	-
Nozzle temperature	255 - 270	°C	-
Melt temperature	250 - 270	°C	-
Mold temperature	60 - 80	°C	-
Hot runner temperature	255 - 270	°C	-