



GLASS FILLED NYLON, 30% BLEND
BASE - NYLON 12
PROCESS: Selective Laser Sintering (SLS)

PROPERTIES

Specific Gravity
Moisture Absorption

CONDITION

20 °C
23 °C

TEST METHOD

ASTM D792
ASTM D570

GLASS FILLED

1.40
0.30%

THERMAL PROPERTIES

Melting Point
DTUL
DTUL

T_m
0.45 MPa
1.82 MPa

DSC
ASTM D648
ASTM D648

185 °C
175 °C
110 °C

MECHANICAL PROPERTIES

Tensile Strength
Tensile Modulus
Tensile Elongation at Break
Flexural Modulus
Impact Strength
Impact Strength

Notched Izod
Unnotched Izod

ASTM D638
ASTM D638
ASTM D638
ASTM D790
ASTM D256
ASTM D256

38.1 MPa
5910 MPa
2 %
3300 MPa
96 J/m
101 J/m

SURFACE FINISH

Facing

As Processed (R_a)
After Polishing (R_a)

6.2 µm
1.0 µm

ELECTRICAL PROPERTIES

Volume Resistivity
Surface Resistivity
Dielectric Constant
Dielectric Strength
Comparative Tracking Index

22 °C, 50 % RH, 500V
22 °C, 50 % RH, 500V
22 °C, 50 % RH, 500V

ASTM D257-93
ASTM D257-93
D150-95
D149-95a
D5288-92

2.0x10¹⁴ohm·cm
2.3x10¹⁴ohm
2.9
1.5x10⁴ v/mm
TBD ,1mm depth

CHEMICAL RESISTANCE

Alkalines, hydrocarbons, fuels and solvents