



ISO 9001:2008 and ISO 13485:2003 Certified

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Unfilled

16,000

13,100

519,000

7.0

60.0

25,100

498,000

25.0

1.0

M109

394

3.1x10⁻⁵

47.0

1.27

0.25



TEMPALUX® POLYETHERIMIDE

Property

@yield

@break

Mechanical

Tensile Strength

Tensile Modulus

Flexural Modulus

Un-Notched

@264 psi

Specific Gravity

Coefficient of Thermal

Expansion (-4° to 302°F)

Limiting Oxygen Index

Water Absorption @24 hours

Hardness

Thermal

Other

Notched @73°F

Heat Deflection Temperature

Izod Impact Strength

Tensile Elongation @yield

Tensile Elongation @break

Flexural Strength @yield

Medical grade Tempalux is made from Ultem[®] polyetherimide (PEI) resin, is an amorphous thermoplastic which exhibits excellent resistance to a wide range of chemicals and disinfectants. Tempalux maintains its size and shape over a broad temperature range as well as tolerates a high amount of stress over extended periods of time. Recommended sterilization techniques for Tempalux include EtO gas, radiation, steam autoclaving, dry heat and cold sterilization.

Units

psi

psi

psi

%

%

psi

psi

ft•lbs/in

ft•lbs/in

M Scale

°F

in/in/°F

%

%

Test Standard

ASTM D638

ASTM D638

ASTM D638

ASTM D638

ASTM D638

ASTM D790

ASTM D790

ASTM D4812

ASTM D256

ASTM D785

ASTM D648

ASTM E831

ASTM D2863

ASTM D792

ASTM D570

The following physical property information is based on typical values of the base polyetherimide resin.

Applications Include:

- Provisional trialsInstrument handles
- Surgical device components

Advantages of Tempalux:

- Lot controlled and traceable
- Resin complies with FDA regulation 21 CFR 177.1575
- Resin meets the requirements of ISO 10993 and USP VI
- Stress relieved

Manufacturing Capabilities:

- Standard Rod : colors dia. 1" to 3¹/₂" ('/2" increments) black dia. 3/3", 1/2", 3/4", 1" to 3¹/₂" ('/2" increments)
- Rod Length: ³/₈" to 2" diameter - 96" 2¹/₂" to 3¹/₂" diameter - 48"

Non Standard

Rod: 1/4", >31/2" to 6" dia.

- Sheet: .035" to .220" thick
- **Slab:** ³/₈" to 4" thick
- Film: .002" to .029" thick

Colors/Grades:

Black

- Blue
- Brown
- Gray
- Green

In addition to our standard capabilities, Westlake also has the ability to process custom resins in various sizes and colors with some exceptions.

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