



POLY-MED, INC.

Bioresorbable Solutions Delivered



DIOXAPRENE® 100M

3DP FILAMENT DATA SHEET

PRODUCT DESCRIPTION

Dioxaprene® 100M 3DP monofilament is derived from a polydioxanone linear homopolymer. Its appearance is white to off-white filament. This material typically loses strength in about 4 to 6 weeks and mass loss in about 6 to 9 months, depending on processing, physiological environment, and anatomical location.

PACKAGING

Filament is packaged into 50g quantities. Standard packaging consists of filament on a spool, placed in a puncture resistant Nylon/Foil/LLDPE pouch. The packaged product is shipped in an outer protective corrugated box for added protection.

BIOCOMPATIBILITY

Dioxaprene®100M 3DP filament meets all the requirements of the guidelines set forth by the Biological Test for Plastics, USP Class VI and acceptance criteria of ISO 10993-5 Cytotoxicity testing.



Sample print with PMI's Dioxaprene® 100M using our in-house equipment.

REFERENCE INFO

PRINT TEMP. 155° - 175°C

BED TEMP. 40° - 70°C

Recommended settings may differ depending on printer equipment and may need to be adjusted.

STRENGTH RETENTION 4 - 6 Weeks

MASS LOSS 6 - 9 Months

Degradation profile times are subject to change based on device geometry and anatomical location.

TENSILE MODULUS [MPa] 540 - 630

ELONGATION% @ BREAK 40 - 330

YIELD STRESS [MPa] 30 - 35

PEAK STRESS [MPa] 30 - 35

Testing was performed on 1.75 mm diameter monofilament in accordance with ASTM D638 with minor modifications.

MATERIAL SPECS

COMPOSITION Polydioxanone, PDO

ITEM NO. 01634

DIAMETER 1.75 ± 0.05 mm

Leaders in Bioresorbables®

Poly-Med, Inc. is registered with the FDA as a medical device manufacturer and has been ISO 13485 registered by UL.

www.poly-med.com

sales@poly-med.com