

For Pricing and Availability, Call **1-800-288-1444**
Ask for Life Sciences

Total Plastics, Inc.™ supplies all areas of life sciences, including orthopaedics, endoscopy, arthroscopy, cardiovascular, neurological, biomechanical, diagnostic and pharmaceutical. Our quality medical grade plastics are used for medical devices, surgical instruments, and sterilization trays and containers. Because of their unique physical properties, certain plastics are well suited for applications where dimensional stability, chemical resistance, cleanliness and regulatory compliance are imperative. Total Plastics is dedicated to providing quality medical grade materials that fit these criteria through our Life Sciences division. Our inventory of versatile medical grade plastics includes sheet, rod, tubing and film, and our knowledgeable staff is ready to assist you with technical inquiries, material selection and product applications through all stages of development.



ACETAL COPOLYMERS (CELCON® M25)

TECAFORM™ AH MT

Tecaform™ AH MT is a semi-crystalline thermoplastic engineering material with high strength and rigidity. It is easily machined and welded, and is suitable for medical and food technology. The material is physiologically harmless and FDA compliant. Tecaform™ AH MT is used to make instrument handles, and for prosthesis part testing.

FDA✓

Colors: Red, Blue, Green, Yellow, Brown, Rust and Grey.

Custom Colors Available, Call for Details.

Standard Rod Diameters: 1", 1-1/2" and 2" in 96" lengths; 2-1/2", 3" and 3-1/2" in 48" lengths

Custom Sizes Available, Call for Details.

All trade and patent rights should be observed. All rights reserved. TECAFORM™ AH MT, – Ensinger Industries, Inc.

POMALUX®

Medical grade Pomalux® is made from an acetal copolymer resin which allows machined products the ability to retain dimensional integrity, plus maintain stability in water and most chemicals at elevated temperatures. Pomalux® products are opaque and are available in a wide array of standard colors as well as on a custom basis. Recommended sterilization techniques for Pomalux® include EtO gas and steam autoclaving. Disinfectants and germicides generally have no effect on Pomalux®, however, acidic solutions can degrade the polymer. The resin used in Pomalux® complies with FDA regulations 21 CFR 177.2470 and 21 CFR 178.3297 for colorants and meets the requirements of USP Class VI specifications. This material is used in provisional trials, instrument handles and medical device components.

FDA✓

Colors: Black, Brown, Dark Blue, Dark Green, Grey, Light Blue, Light Green, Red, Rust and Yellow.

Custom Colors Available, Call for Details.

Standard Rod Diameters: 1", 1-1/2" and 2" in 96" lengths; 2-1/2", 3" and 3-1/2" in 48" lengths

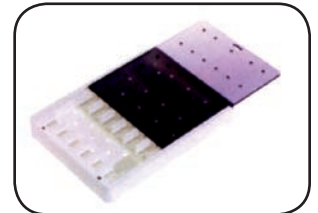
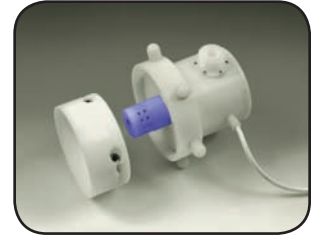
Custom Sizes Available, Call for Details.



ANTIMICROBIAL FILLED PLASTIC

TECAFORM™ AH SAN

Polyacetal Tecaform™ AH SAN is charged with an antimicrobial additive to provide additional safety in medical technology and food processing. The antimicrobial effect is achieved by a gradual release of silver ions that create many advantages, such as reduced bacterial contamination and lower risk of thermal damage. Cleaning will continuously renew the antimicrobial effect. Tecaform™ AH SAN's raw material, color pigments and antimicrobial additive conform to FDA standards. Tecaform™ AH SAN is USP Class VI and ISO 10993 compliant. It is used in applications involving water contact, and for surgical instrument handles.



FDA✓

Custom Colors Available, Call for Details.

Custom Sizes Available, Call for Details.

All trade and patent rights should be observed. All rights reserved. TECAFORM™ AH SAN, – Ensinger Industries, Inc.

HEAT STABILIZED POLYPROPYLENES

PROPYLUX® HS / HS2

Medical grade Propylux® HS is made from an FDA approved polypropylene resin. Through a unique heat-stabilizing process, the extruded material is able to withstand higher temperatures with less water absorption than standard polypropylene. Recommended sterilization techniques for Propylux® HS include steam autoclaving and cold sterilization. Propylux® HS2 is produced from an FDA and USP Class VI approved homopolymer resin and exhibits better heat and dimensional stability over Propylux® HS. Propylux® HS is used for provisional trials, instrument handles and other medical devices. Propylux® HS2 is used for cranio-maxillofacial, trauma and spinal implant trays, as well as sterilization tray components.

FDA✓

Propylux HS Rod Colors: Black, Brown, Dark Blue, Light Blue, Dark Green, Grey, Red, Orange and Yellow.
Custom Colors Available, Call for Details.

Standard Diameters: 1", 1-1/2" and 2" in 96" lengths; 2-1/2" and 3" in 48" lengths

Custom Sizes Available, Call for Details.

Propylux HS2 Sheet Color: White.

Custom Colors Available, Call for Details.

Standard Sizes: 1/2", 1" and 1-1/2" in 40" x 48" sheet; 2" and 2-1/2" in 24" x 48" sheet

Custom Sizes Available, Call for Details.

TECAPRO™ MT

Due to a special stabilization process, Tecapro™ MT shows a better resistance to higher temperatures than standard polypropylene. Compared to other materials, such as stainless steel and PTFE, Tecapro™ MT possesses a much lower density which results in a reduced weight of the component parts. It is laser markable and machinable. Tecapro™ MT offers FDA conformity of the raw material and color pigment. It is used to make surgical trays and sterilization containers.

FDA✓

Color: White.

Custom Colors Available, Call for Details.

Standard Sizes: 1", 1-1/4", 1-1/2", 1-3/4", 2" and 2-1/2" in 24" x 48" sheet

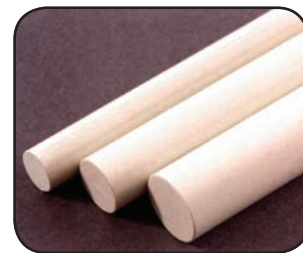
Custom Sizes Available, Call for Details.

All trade and patent rights should be observed. All rights reserved. TECAPRO™ MT, – Ensinger Industries, Inc.

PEEK® (Polyetheretherketone)

TECAPEEK™ CLASSIX (Prolonged up to 30 day implantable)

Tecapeek™ Classix is an ultra-high performance, biocompatible thermoplastic with mechanical properties comparable with those of Tecapeek™ and Tecapeek™ MT. Tecapeek™ Classix has excellent chemical resistance, good strength, rigidity, toughness and hardness. It is easily machined. Tecapeek™ Classix is used in catheters, tubes (MIC), medication dosing systems, devices in contact with blood (dialysis), laparoscopes, endoscopes, surgical instruments, short-term implants and more.



Colors: Off-White and Black.

Standard Diameters: 6 mm, 8 mm, 10 mm, 20 mm, 30 mm, 45 mm

Custom Sizes Available, Call for Details.



TECAPEEK™ MT (Limited contact, 24 hours, USP Class VI compliant PEEK)

Tecapeek™ MT is a semi-crystalline high performance, machinable thermoplastic for very demanding applications, preferably in medical and food technology. Tecapeek™ MT is FDA and ISO 10993 compliant, plus it meets USP Class VI biocompatibility requirements for instrumentation. Tecapeek™ MT has excellent chemical resistance and stress cracking resistance. It also has good wear resistance, sliding properties and a high resistance to gamma radiation. Tecapeek™ MT is used in surgical instruments, instrument holders and sterilization containers.



Colors: Black, Red, Blue, Green and Yellow. Custom Colors Available, Call for Details.

Standard Diameters: 12 mm, 15 mm, 20 mm, 25 mm, 32 mm, 36 mm, 40 mm, 50 mm, 60 mm, 65 mm

Custom Sizes Available, Call for Details.

TECAPEEK™ CF30/XP98 (30% Carbon Filled PEEK®)

Tecapeek™ CF 30 is a 30% carbon fiber reinforced semi-crystalline, high performance, machinable thermoplastic for extremely demanding applications. Tecapeek™ CF30 has excellent creep resistance, good chemical resistance, is hydrolysis resistant and flame retardant UL94 V-0. Tecapeek™ CF30 is very rigid and strong with good wear resistance. It is also biocompliant to the requirements of ISO 10993 for less than 24 hours of contact. Tecapeek™ CF30 is used in targeting guides, fixation systems and retractor blades.



Color: Black.

Standard Sizes: Call for Availability.

All trade and patent rights should be observed. All rights reserved.
TECAPEEK™ CLASSIX, TECAPEEK™ MT
and TECAPEEK™ CF30/XP98 – Ensinger Industries, Inc.

POLYCARBONATE

TECANAT™ PC (USP Class VI Polycarbonate Rod)

Tecanat™ PC is an amorphous engineering thermoplastic with high transparency and toughness, making it ideal for one-time-use medical devices. Tecanat™ PC has good strength and heat deformation resistance. It is easily machined, welded and bonded, and provides good electrical insulation. Tecanat™ shapes are certified as meeting the requirements of USP Class VI. It is commonly used to make medical devices.

Color: Clear Transparent.

Call for Sizes and Availability.

All trade and patent rights should be observed. All rights reserved. TECANAT™ PC, – Ensinger Industries, Inc.



ZELUX® GS (Gamma Stabilized Polycarbonate)

Medical grade Zelux® GS polycarbonate is produced from a resin formulated to meet the stringent performance characteristics and requirements of the healthcare industry. The resin used in Zelux® GS is USP Class VI compliant and suitable for EtO gas and limited autoclaving sterilization. The resin also has proprietary color enhancement technology to reduce color shift caused by gamma radiation. Zelux® GS offers excellent impact resistance and optical clarity. Zelux® GS is easy to machine and lot controlled and traceable. It is used in surgical equipment, instrument components, housings and covers.

Color: Clear with Blue Tint. Custom Tints and Opaques Available.

Standard Lengths: 48"

Standard Diameters: 1", 1-1/2"

Custom Sizes Available, Call for Details.



POLYETHERIMIDE (Ultem®)

TEMPALUX®

Tempalux® is an amorphous thermoplastic polyetherimide. Stock shapes made from Ultem® resin possess a combination of useful characteristics, including high strength at elevated temperatures, a high modulus, and broad chemical resistance. Tempalux® stock shapes are inherently flame resistant with low smoke emission. Tempalux® stock shapes display property retention and resistance to environmental stress cracking when exposed to a wide variety of chemicals. Tempalux® rod, slab, and tubular bar are air annealed for stress relief. Tempalux® is UV stable and FDA compliant. It is used for surgical instruments, provisional trials and various medical devices.

FDA✓

Colors: Black, Brown, Grey, Dark Green, Dark Blue, Light Green, Light Blue, Purple, Rust and Yellow.

Custom Colors Available, Call for Details.

Standard Diameters: 1", 1-1/2" and 2" in 96" lengths; 2-1/2", 3" and 3-1/2" in 48" lengths

Custom Sizes Available, Call for Details.

TECAPEI™ MT

Tecapei™ MT offers good autoclaving performance for instruments and orthopedic provisional trials. A radio opaque grade is available, Tecapei™ MT XRO, for procedures where the surgeon desires clear visibility of the instrument on fluoroscopy. Clear visibility to quickly locate parts on X-ray is also a safety feature of this product. Medical applications include instruments and orthopedic provisional trials.



Colors: Black, Brown, Grey, Dark Green, Dark Blue, Light Green, Light Blue, Purple, Rust and Yellow.

Custom Colors Available, Call for Details.

Standard Diameters: 1", 1-1/2", 2", 2-1/2", 3", 3-1/2"

Custom Sizes Available, Call for Details.

All trade and patent rights should be observed. All rights reserved. TECAPEI™ MT, – Ensinger Industries, Inc.

POLYPHENYLENE OXIDE (Noryl®)**TECANYL™ MT**

Tecanyl™ MT (Noryl®) is an amorphous engineering thermoplastic with good strength and electrical insulation properties for varied applications. Tecanyl™ MT is lightweight, easily bonded and produced by a specially developed resin for repeated sterilization in the autoclave. This material offers the autoclaving performance of PPSU but is easier to machine with less tool wear. Tecanyl™ MT is also available in a radio opaque grade, Tecanyl™ MT XRO. It is used for surgical instruments, provisional trials and various medical devices.

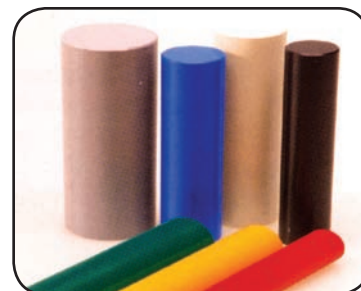
Color: Grey. Custom Colors Available, Call for Details.

Standard Diameters: Call for Availability. Custom Sizes Available, Call for Details.

All trade and patent rights should be observed. All rights reserved. TECANYL™ MT, – Ensinger Industries, Inc.

POLYPHENYLSULFONE (Radel®)**RADEL® R5500**

Medical grade Radel® R5500 resin offers exceptional hydrolytic stability, toughness, and superior impact strength over a wide temperature range. This product also offers high deflection temperatures and outstanding resistance to environmental stress cracking. Recommended sterilization techniques for Radel® R5500 include EtO gas, radiation, steam autoclaving, dry heat and cold sterilization. It is lot controlled and traceable and markable. The resin meets the requirements of USP Class VI specifications. Radel® R5500 is used in provisional trials, instrument handles and medical device components.



Colors: Bone White (NT-15), Black, Blue, Grey, Green, Brown, Rust, Red and Yellow.

Custom Colors Available, Call for Details.

Standard Diameters: 1", 1-1/2" and 2" in 96" lengths; 2-1/2", 3" and 3-1/2" in 48" lengths.

Custom Sizes Available, Call for Details.

TECASON™ P MT (Radel® R)

Tecason™ P MT is a mechanical grade plastic with exceptional resistance to the common sterilization techniques, giving added safety in medical applications. The material also possesses high thermal resistance, excellent mechanical properties and toughness. The bright color choices make it easy to distinguish between different instruments and sizes. Tecason™ P MT shapes are tested and certified to ISO 10993 and USP Class VI for devices intended for body contact for less than 24 hours. All colors are tested for cytotoxicity as defined in ISO 10993. Tecason™ P MT is also available in a radio opaque version, Tecason™ P XRO. Tecason™ P MT is ideal for repeated use items with excellent autoclaving performance such as instrument handles, sizing trials and sterilization trays.

Colors: Bone White (NT-15), Black, Blue, Grey, Green, Brown, Rust, Red and Yellow.

Custom Colors Available, Call for Details.

Standard Diameters: 1", 1-1/2", 2", 2-1/2", 3", 3-1/2"

Custom Sizes Available, Call for Details.

All trade and patent rights should be observed. All rights reserved. TECASON™ P MT, – Ensinger Industries, Inc.





POLYSULFONE (Udel®)

TECASON® S

Tecason® S is a transparent engineering plastic known for its chemical resistance, rigidity, high-temperature performance, and its ability to operate in an autoclave environment. Tecason® S is FDA and NSF compliant and holds its excellent mechanical properties over a wide range of temperatures. Tecason® S is used in analytical instrumentation and medical devices.



Color: Natural (light amber) Translucent.

Standard Diameters: 3/16" to 4-3/4" in 10' lengths; 5" in 5' lengths

Standard Sheet Sizes: 1/4" to 4" thickness in 24" x 48" sheets

UHMW (GUR®)

LENNITE® GUR 1020/1050

Medical grade Lennite® UHMWPE is produced from premium resins in accordance with ASTM specification F648 and International Standard ISO 5834-1 for surgical implants. Recommended sterilization techniques include EtO gas, cold sterilization, and limited gamma irradiation. Lennite® UHMWPE is lot controlled and traceable. Stress relieved custom certifications are available. It is used in surgical implants as articulating surfaces for total joint arthroplasty, and in various instruments, devices and components for orthopedic and general surgery.



Color: Natural.

Standard GUR 1050 Diameters: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 3-1/2" and 4" in 60" and 120" lengths

GUR 1020 Products: Call for Availability.

Total Plastics carries the full line of Tygon® application specific tubing from Saint-Gobain® Performance Plastics. See pages 92 & 93 for our Tubing and Market Overview where the products are organized by industry.

Tygon® Medical Tubing

- PharMed® BPT Tubing
- Versilic® High-Strength Silicone Tubing (SPX-50)
- Tygon® Sanitary Silicone Tubing (3350)
- Tygon® Medical/Surgical Tubing (S-50-HL)
- Tygon® Microbore Tubing (S-54-HL)
- Tygon® High Purity Tubing (2275)
- Chemfluor® FEP Tubing

