



Bio-Ease⁺™

Re-Usable Non-Metallic Clamp

*For the single-use
disposable/bio-pharm
market*



The Superior Non-Metallic Clamp

Bio-Ease+™ is a patented non-metallic clamp designed to meet the needs of pharmaceutical and bioprocessing testing and manufacturing.

- Single-Use Systems (SUS)
- Pharmaceutical Manufacturing
- Vaccine Production
- Laboratory
- Applications Where Metal is Incompatible



Email: info@puretransfer.com
www.puretransfer.com
Tel: 033 39 390 034



Bio-Ease⁺™ Hinged Tri-Clamp®

White Nylon Sanitary Tri-Clamp® for Bio-Pharm

TBL Performance Plastics' patented Bio-Ease⁺™ sanitary clamp is designed to address the needs of the single-use disposable/bio-pharm market. Bio-Ease⁺™ hinged clamps are manufactured using a glass-reinforced, FDA grade, USP Class VI Nylon and are designed to be used as a component for single-use transfer lines and a wide range of bio-process systems.

Bio-Ease⁺™ Clamp Features

- Tamper-proof and cleaner design. Won't "trip" open.
- Greater Sealing: Exclusive limited-slip design and floating hinge self-adjusts for balanced contact pressure.
- Universal Standard Clamp: Compatible with ASME-BPE and BPSA standard non-metallic and stainless flange ferrules.
- More efficient locking mechanism.
- Light weight, less stress.
- Corrosion resistant.
- USP Class VI Nylon 66 Material.
- Can be repeatedly autoclaved at 134°C for 5 minutes.
- Testing has shown no detectable weakening after 40kGy Gamma Irradiation.
- Can be custom laser engraved.
- Color coded knobs available in **WHITE, BLUE, RED, YELLOW** and **GREEN**.
- Lot and batch traceable.

Sterilization Methods

- Gamma Irradiation
- Electron Beam Irradiation
- Autoclave
- Ethylene Oxide (EtO)

Materials

- USP Class VI
- FDA 21CFR177.1500
- Glass-Reinforced White Nylon 66

Material Properties

Properties	Test Method	Units	Value
Density	ISO 1183	kg/m ³ (g/cm ³)	1390 (1.39)
Stress at Break	ISO 527	Mpa (kpsi)	200 (29)
Stain at Break	ISO 527	%	3.5
Tensile Modulus	ISO 527	Mpa (kpsi)	10500 (1520)
Flexural Modulus	ISO 178	Mpa (kpsi)	9300 (1348)
Flexural Strength	ISO 178	Mpa (kpsi)	290 (42)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²	10

Thermal

Deflection Temperature 1.80MPa	ISO 75-1/-2	°C (°F)	252 (486)
Melting Temperature 10° C/min	ISO 179/1eA	°C (°F)	263 (505)



Bio-Ease HD™ Pinch Clamp



Bio-Ease⁺™ Patent Number: 9151420
Zytel® is a DuPont Registered Trademark



Email: info@puretransfer.com
www.puretransfer.com
 Tel: 033 39 390 034