- Autoclavable single-use containers
- Kynar® PVDF film for strength and flexibility



klave-it™ autoclavable bioprocess containers from Parker domnick hunter are made of a select Kynar® PVDF film designed to maintain flexibility, strength and impact resistance after sterilization by autoclave.

Autoclaving bioprocess container systems in-house provides greater control and more adaptive sampling procedures. klave-it<sup>TM</sup> bioprocess containers can also be filled and then autoclaved. Because klave-it<sup>TM</sup> film is constructed of a fluorinated polymer, it has excellent chemical resistance to minimize leachables, making it safe for use with critical products.

#### Features and Benefits

- Low TOC (total organic carbon)
- Low permeability
- USP Class VI
- Animal derived component free
- Available in pillow style
- Ports are available in  $\frac{1}{8}$ ,  $\frac{1}{4}$ ,  $\frac{3}{8}$  and  $\frac{1}{2}$  sizes



Note: klave-it™ is a trademark of Parker Hannifin Corporation.

# **Specifications**

### Materials of Construction

■ Material: Kynar® PVDF film

#### **Fittings**

■ All standard industry connections

#### Working Temperature Range

-20°C (-4°F) to +80°C (176°F)

#### **Physical Properties**

■ Elongation at Break (%:) ASTM D-638 50-200

■ Shore Hardness: ASTM D-2240

65-70 Shore D ASTM D-792

Specific Gravity: ASTM D-7 1.76-1.79

■ Tensile Break Strength: ASTM D-638

(psi) 2,500-5,000

#### Sterilization

■ Gamma Irradiation: Maximum of 50 kGy ■ Autoclave: 1 bar (14.5 psi) @

121°C (250°F)

### Barrier

Oxygen Permeability: ASTM D-3985

3.8 - 4.6 x 10<sup>-6</sup> g/100 in<sup>2</sup>/day

■ Carbon Dioxide ASTM D-1434

 $Permeability: \hspace{1.5cm} 2.3 \text{ x } 10^{-5} \text{ cm}^3/100 \text{ in}^2/\text{day}$ 

■ Water Vapor ASTM E96-80

Transmission Rate: 4.2 x 10<sup>-6</sup> cm<sup>3</sup>/100 in<sup>2</sup>/day

#### Certified Standard of Compliance

- USP Class VI testing
- LAL testing
- Systematic toxicity testing

## **Applications**

Any application in which preor post-filling sterilization by autoclaving is required

Parker domnick hunter technologies can be combined to produce integrated solutions that will speed up development times, increase efficiency and safety, and guarantee reproducible product quality.











