

## Durapore® Multimedia Cartridge

0.22 µm Rated  
Catalogue Number: CVSX73TP3  
Lot Number: C9DN97288

### Good Manufacturing Practices

This product was manufactured in a Millipore facility which adheres to Good Manufacturing Practices.

### ISO® 9001 Quality Standard

This product was manufactured in a Millipore facility whose Quality Management System is approved by an accredited registering body to the appropriate ISO 9001 Quality Systems Standard.

### Non-Fiber Releasing

This product was manufactured with a Millipore Durapore membrane which meets the criteria for a "non-fiber releasing" filter as defined in 21 CFR 210.3 (b) (6).

### Component Materials Toxicity

Component materials were tested and meet the criteria for the USP Class VI Biological Test for Plastics.

### Indirect Food Additive

The Durapore membrane used in this product meets the FDA Indirect Food Additive requirements cited in 21 CFR 177.2910. All other component materials also meet the FDA Indirect Food Additive requirements cited in 21 CFR 177-182.

### Alcohol Reference Test

Sterilizing-grade (0.22 µm) hydrophilic Durapore membrane is certified to a bubble point equal to or greater than 18.5 psig (1.280 mbarg) in a 70%/30% IPA/water mixture with nitrogen at 23° C.

### 100% Integrity Testing in Manufacturing

Each unit must pass the Millipore Integrity Test correlated to the *Brevundimonas diminuta* ASTM® FB338 bacterial challenge test.

## Quality Assurance Lot Release Criteria

This manufacturing lot was sampled, tested and released by Quality Assurance to the following specifications:

### Bacterial Retention

Samples were quantitatively retentive of a minimum *Brevundimonas diminuta* challenge concentration of  $1 \times 10^7$  CFU/cm<sup>2</sup> using ASTM F838 methodology.

### USP Bacterial Endotoxins

A cartridge aqueous extraction contains less than 0.5 EU/mL as determined using the Limulus Amebocyte Lysate (LAL) test.

### Integrity

Samples exhibited a water bubble point equal to or greater than 50.0 psig (3.450 mbarg) with air at 23° C.

Samples exhibited an air diffusional flow rate of less than or equal to 32.4 cc/min at 40 psig (2.760 mbarg) in water at 23° C per 30-inch cartridge.

### Thermal and Hydraulic Stress

Samples were steamed in place at 123° C and maintained integrity after a forward stress to 80 psid (5.5 bard) and a reverse stress to 50 psid (3.4 bard).

### Flow Rate and Pressure Drop

Samples met a maximum pressure drop of 4.2 psid (290 mbard) at 6 gpm (22.7 L/min) per 30-inch cartridge with clean water at 23° C.

### USP Oxidizable Substances

Effluent was negative after a water flush of 15000 mL per autoclaved 30-inch cartridge.

## Quality Assurance Audit Criteria

This product was designed and manufactured to meet the following specifications. Performance is confirmed by testing on an audit basis.

### Toxicity

This product is non-toxic per the current USP General (Mouse) Safety Test.

### Gravimetric Extractables

The extractables level was equal to or less than 70 mg per 10-inch cartridge after 24 hours in ASTM® Type 1 reagent-grade water at controlled room temperature.

### Multiple Sterilization Cycles

Integrity was maintained after 6 steam-in-place cycles of 30 minutes at 123° C.



Peter Eichert  
Quality Manager

