

## fact sheet

# Memtrex\* NY capsules

# with hydrophilic Nylon66 membrane



Figure 1: Memtrex NY Capsule Filters

### description and use

Memtrex NY Capsule Filters (CMNY) have a unique polyester, and polypropylene construction for enhanced reliability, and usefulness. Polyester housings, and support layers ensure and maintain capsule integrity, while a nylon prefilter membrane layer over a final membrane layer significantly enhances filter life. CMNY filters are suitable for a broad range of applications, meeting worldwide demand for functionality in chemical, beverage, and water processing. (Figure 1)

# typical applications

Memtrex NY Capsule Filters have been designed for reliable filtration in a wide range of applications, including:

- Beverages
- Cosmetics
- Electronics
- Fine and Bulk Chemicals
- Pharmaceuticals

#### features and benefits

- Utilizes inherently hydrophilic, high-purity Nylon66 membrane
- Innovative serial layer membrane design
- Thermal weld techniques no adhesives, resins or binders
- Low extractables
- 100% integrity tested and rinsed for uncompromised reliability and consistency

#### available absolute micron ratings

CMNY filters are available in absolute micron ratings of: 0.1, 0.2, 0.45, and 0.65  $\mu$ m.

#### materials of construction

- Filtration Media: Two Layers of Hydrophilic Nylon66 (prefilter layer over final layer)
- Membrane Support Layers: Polyester Microfiber
- Structural Components: Polyester and Polypropylene

Table 1 details the dimensions and Table 2 shows the operational limits of the Memtrex NY Capsule Filters. Table 3 details the results of integrity testing at various micron ratings and test pressures.

Table 1: Dimensions

| Diameter: 3.5" (9cm) |                      |                           |  |  |
|----------------------|----------------------|---------------------------|--|--|
| Capsule Size         | Effective Filtration | Area Length¹              |  |  |
| Small                | 0.8 ft² (748 cm²)    | 3.5 – 5.0" (9 – 13 cm)    |  |  |
| Medium               | 3.0 ft² (2806 cm²)   | 7.6 – 9.1" (19 – 23 cm)   |  |  |
| Large                | 5.9 ft² (5500cm²)    | 11.5 – 13.0" (29 – 33 cm) |  |  |

Varies with connection style

Find a contact near you by visiting <a href="www.suezwatertechnologies.com">www.suezwatertechnologies.com</a> and clicking on "Contact Us."

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<sup>\*</sup>Trademark of SUEZ; may be registered in one or more countries.

Table 2: Operational Limits

| Description                | Operational Limits   |  |
|----------------------------|--|--|
| Max. Operational Pressure  | 80 psi (5.5 bar) at 70°F (21°C) in<br>liquid<br>55 psi (3.8 bar) at 70°F (21°C) in gas |  |
| Max. Differential Pressure | 60 psi (4.1 bar) at 70°F (21°C)  |  |
| Max. Operating Temperature | 110°F (43°C) at ≤30 psid (2.1 bar)<br>Operating Pressure                               |  |

Table 3: Integrity Testing

Air diffusion through water saturated membrane is  $\leq 1.8$  cc/min per  $\mathrm{ft}^{\circ}$  of Effective Filtration Area

| Micron Rating | Test Pressure    |  |
|---------------|------------------|--|
| 0.1 μm        | 40 psi (2.8 bar) |  |
| 0.2 μm        | 30 psi (2.1 bar) |  |
| 0.45 μm       | 20 psi (1.4 bar) |  |
| 0.65 µm       | 10 psi (0.6 bar) |  |

#### additional information

Memtrex NY Capsule filters may be sanitized with a variety of commonly used chemical agents; however, acidic solutions should be avoided. The capsules may be repeatedly autoclaved (250°F [121°C], 30 minutes) for up to 5 cycles.

SUEZ certifies that the materials contained in its Memtrex NY Capsule filters meet U.S. FDA requirements for food contact under the applicable regulations in 21 CFR. For further information, contact SUEZ. Memtrex NY filters meet the test criteria for USP class VI-121°C Plastics.

Figures 2, 3, and 4 show the test data results of flow performance for the small, medium, and large Memtrex NY Capsule Filters using a 10-inch length filter.

SUEZ filter capsules are designed and manufactured for resistance to a wide range of chemical solutions. Conditions will vary with each application and users should carefully verify chemical compatibility. Consult

the ordering information in Table 4 below or contact your SUEZ distributor for more information.



Figure 2: Memtrex NY small capsule flow rate performance in clean water.

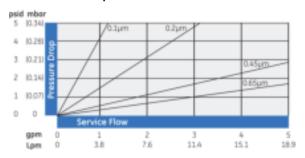


Figure 3: Memtrex NY medium capsule flow rate performance in clean water.

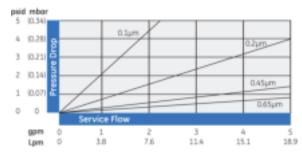


Figure 4: Memtrex NY large capsule flow rate performance in clean water.<sup>2</sup>

#### for more information

Call USA Toll free 800-446-8004 or +1-757-855-9000 or contact your local SUEZ representative at www.suezwatertechnologies.com.

Table 4: Ordering Information

| rubte 4: ordering information |  |   |  |  |
|-------------------------------|--|---|--|--|
| Absolute<br>cron Rating       | Capsule Size                                   | Connections <sup>a</sup>  |  |  |
| 2 = 0.2 μm 30                 | = medium (3.0 ft²)<br>9 = large (5.9 ft²)      | = 1/4" - 1/2" (6.3 - 12.7 mm) hose barb  M = 3/8" (9.5 mm) hose barb  R = 1/4" (6.3 mm) NPT mole  W = 1/2" (12.7 mm) NPT mole  Y = 1.5" (38.1 mm) sanitary flange |  |  |
|                               | 1 = 0.1 μm 08<br>2 = 0.2 μm 30<br>= 0.45 μm 56 | Absolute Capsule Size cron Rating  1 = 0.1 µm 08 = small (0.8 ft²) L 2 = 0.2 µm 30 = medium (3.0 ft²) . = 0.45 µm 59 = large (5.9 ft²)                            |  |  |

<sup>3</sup>Choose an inlet and outlet connection



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<sup>&</sup>lt;sup>2</sup>Data based on 10 inch length filter