

# 3M™ LifeASSURE™ EMZ Series Electronics Grade Membrane Filter Cartridges

3M™ LifeASSURE™ EMZ Series Filter Cartridges are high efficiency, naturally hydrophilic, charge modified, Nylon 6,6 membrane filters designed to meet the exacting requirements of Ultra Pure Water (UPW), critical parts cleaning, and chemical applications. Utilizing multi-zone membrane and Advanced Pleat Technology (APT), 3M LifeASSURE EMZ Series Filter Cartridges provide superior flow characteristics with minimal pressure drop.

## Multi-Zone Membrane Technology

3M LifeASSURE EMZ Series Filter Cartridges incorporate 3M multi-zone membrane technology to maximize contaminant holding capacity while maintaining particle reduction efficiency. The multi-zone membrane consists of a larger pore size and volume (more open) zone on the upstream section and a smaller pore size (tighter) zone on the downstream side. The higher porosity zone on the upstream side provides effective pre-filtration of large particles resulting in higher contaminant reduction capacity and increased filter life, compared to a single zone membrane. The lower porosity zone on the downstream section provides a sharp retention cut-off at the rated pore size. As shown in the SEM micrograph (Figure 1), the multi-zone structure enhances the internal surface area, lowers pressure drop, and increases contaminant holding capacity and filter life thereby eliminating the need for filters constructed with a double layer of membrane.



## Features & Benefits

### Charge Modified Nylon Membrane

- Mechanical and electro-kinetic contaminant reduction delivers extremely low particle counts

### High Flow Rates — Low Pressure Drops

- New water systems can be optimized, decreasing capital costs; existing systems can deliver desired flows at lower pressure drops, resulting in lower cost of ownership

### Increased Membrane Area

- Maximize contaminant holding capacity

### Technical Support From 3M Applications Engineering

- Application specific engineering expertise for end users

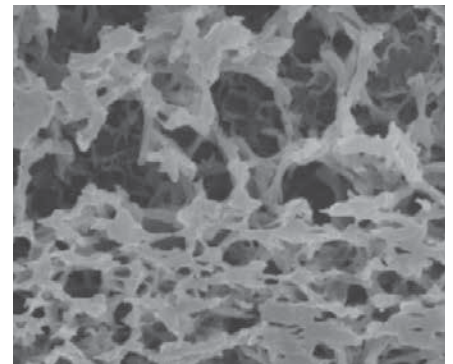


Figure 1. SEM showing the multi-zone structure.

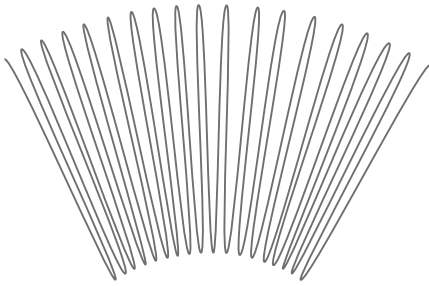


Figure 2. Conventional pleat design.

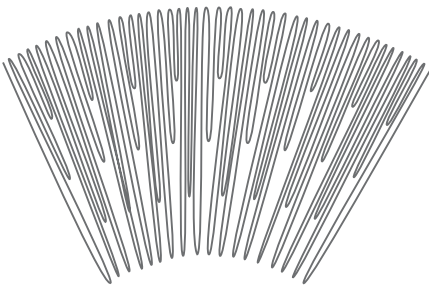
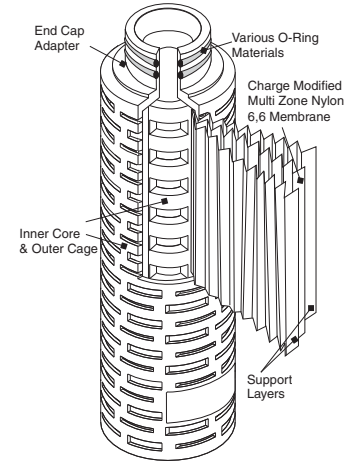
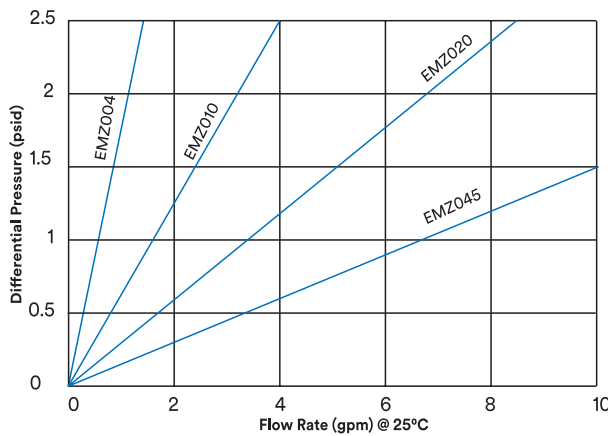


Figure 3. Advanced pleat technology.

## 3M™ LifeASSURE™ EMZ Series Filter Cartridge Construction

3M™ LifeASSURE™ EMZ Series Filter Cartridges are constructed of high efficiency, naturally hydrophilic, single layer multi-zone charge modified Nylon 6,6 membrane. The cage, core, end caps, adapters, and membrane supports are made of polypropylene. No adhesives, binders, or surfactants are used in the manufacturing process. Filter cartridges are manufactured, rinsed with 18 Megohm-cm DI water, dried and bagged in a clean environment under an ISO certified quality system.

Chart 1. EMZ – 10" Filter Cartridge Typical Water Flow Rate



### Cartridge Components

|   |  |
|---|--|
| <b>Membrane</b>                                       | Multi-Zone Naturally Hydrophilic Charge Modified Nylon 6,6 |
| <b>Cage, Core, End-Caps, and Media Support Layers</b> | Polypropylene  |

### Cartridge Dimensions

|                                 |   |
|---------------------------------|---|
| <b>Filtration Surface Area</b>  | 11 ft. <sup>2</sup> (1m <sup>2</sup> )                              |
| <b>Nominal Outside Diameter</b> | 2-3/4 in. (7cm) nominal   |
| <b>Nominal Length</b>           | 10 in. (25.4cm), 20 in. (50.8cm), 30 in. (76.2cm), 40 in. (101.6cm) |

### Operating Parameters

|                                      |   |
|--------------------------------------|---|
| <b>Maximum Operation Temperature</b> | 176°F (80°C) for 30 minutes                                       |
| <b>Maximum Differential Pressure</b> | 80 psid @ 77°F (5.5 bar @ 25°C); 35 psid @ 176°F (2.4 bar @ 80°C) |
| <b>Reduction Ratings (absolute)</b>  | 0.04µm, 0.1µm, 0.2µm, 0.45µm                                      |

### Integrity Test Values — Maximum Air Diffusion

|               |                               |
|---------------|-------------------------------|
| <b>0.04µm</b> | 23 cc/min @ 40 psi (2.7 bar)  |
| <b>0.1µm</b>  | 33 cc/min @ 19 psi (1.3 bar)  |
| <b>0.2µm</b>  | 30 cc/min @ 12 psi (0.83 bar) |
| <b>0.45µm</b> | 15 cc/min @ 6 psi (0.41 bar)  |

**Intended Use(s):** 3M™ LifeASSURE™ EMZ Series Filter Cartridges are intended for use in industrial filtration applications of aqueous fluids in accordance with the applicable product instructions and specifications. 3M LifeASSURE EMZ Series Filter Cartridges are also intended for use with non-aqueous fluids where materials of construction are compatible. Since there are many factors that can affect a product's use, the customer and user remain responsible for determining whether the 3M product is suitable and appropriate for the user's specific application, including user conducting an appropriate risk assessment and evaluating the 3M product in user's application.

**Restrictions on Use:** 3M advises against the use of these 3M products in any application other than the stated intended use(s), since other applications have not been evaluated by 3M and may result in an unsafe or unintended condition. Do not use the 3M product, in a medical device, drug, or cosmetic application; or in applications involving life-sustaining medical applications or prolonged contact with internal bodily fluids or tissues. If you are considering using this 3M product for a restricted use, you must first contact 3M with information about your proposed application to request prior written authorization for supply for such use. 3M LifeASSURE EMZ Series Filter Cartridges are not for use in food contact applications.

## 3M™ LifeASSURE™ EMZ Series Filter Cartridge Ordering Guide

| Model Number | 3M ID          | Global ID  | Description |              |   |
|--------------|----------------|------------|-------------|--------------|---|
|              |                |            | Length      | Rating (abs) | End Treatments                              |
| EMZ004F01EC  | 70-0203-4065-2 | 7010413628 | 9.7 in.     | 0.04µm       | DOE EPR                                     |
| EMZ004F01CB  | 70-0203-3669-2 | 7010339385 | 10 in.      | 0.04µm       | 222 Spear Fluorocarbon                      |
| EMZ004F01CH  | 70-0203-3670-0 | 7010303370 | 10 in.      | 0.04µm       | 222 Spear Clear Silicone                    |
| EMZ004F01CK  | 70-0203-3671-8 | 7100089934 | 10 in.      | 0.04µm       | 222 Spear PTFE Encapsulated Fluorocarbon    |
| EMZ004F01FK  | 70-0203-3673-4 | 7100089935 | 10 in.      | 0.04µm       | 222 Flat Cap PTFE Encapsulated Fluorocarbon |
| EMZ004F02CC  | 70-0203-3674-2 | 7010381850 | 20 in.      | 0.04µm       | 222 Spear EPR                               |
| EMZ004F02CH  | 70-0203-3675-9 | 7100089949 | 20 in.      | 0.04µm       | 222 Spear Clear Silicone                    |
| EMZ004F02CK  | 70-0203-3676-7 | 7100089936 | 20 in.      | 0.04µm       | 222 Spear PTFE Encapsulated Fluorocarbon    |
| EMZ004F02FB  | 70-0203-3677-5 | 7010339387 | 20 in.      | 0.04µm       | 222 Flat Cap Fluorocarbon                   |
| EMZ004F02FC  | 70-0203-3678-3 | 7010291624 | 20 in.      | 0.04µm       | 222 Flat Cap EPR                            |
| EMZ004F02FK  | 70-0203-3679-1 | 7100089937 | 20 in.      | 0.04µm       | 222 Flat Cap PTFE Encapsulated Fluorocarbon |
| EMZ004F03FC  | 70-0203-3929-0 | 7010415479 | 30 in.      | 0.04µm       | 222 Flat Cap EPR                            |
| EMZ004F03BB  | 70-0203-3680-9 | 7100089926 | 30 in.      | 0.04µm       | 226 Spear Fluorocarbon                      |
| EMZ004F03CB  | 70-0203-3681-7 | 7100089956 | 30 in.      | 0.04µm       | 222 Spear Fluorocarbon                      |
| EMZ004F03CC  | 70-0203-3682-5 | 7100089927 | 30 in.      | 0.04µm       | 222 Spear EPR                               |
| EMZ004F03CH  | 70-0203-3683-3 | 7010381854 | 30 in.      | 0.04µm       | 222 Spear Clear Silicone                    |
| EMZ004F03FH  | 70-0203-3684-1 | 7010339389 | 30 in.      | 0.04µm       | 222 Flat Cap Clear Silicone                 |
| EMZ004F03FK  | 70-0203-4503-2 | 7010303486 | 30 in.      | 0.04µm       | 222 Flat Cap PTFE Encapsulated Fluorocarbon |
| EMZ004F04CB  | 70-0203-3685-8 | 7010381855 | 40 in.      | 0.04µm       | 222 Spear Fluorocarbon                      |
| EMZ004F04CC  | 70-0203-3686-6 | 7100089928 | 40 in.      | 0.04µm       | 222 Spear EPR                               |
| EMZ004F04CK  | 70-0203-3688-2 | 7010339390 | 40 in.      | 0.04µm       | 222 Spear PTFE Encapsulated Fluorocarbon    |
| EMZ004F04FK  | 70-0203-3689-0 | 7010381857 | 40 in.      | 0.04µm       | 222 Flat Cap PTFE Encapsulated Fluorocarbon |
| EMZ010F01EA  | 70-0203-3622-1 | 7100089918 | 9.7 in.     | 0.1µm        | DOE Silicone                                |
| EMZ010F01EB  | 70-0203-3941-5 | 7010340570 | 9.7 in.     | 0.1µm        | DOE Fluorocarbon                            |
| EMZ010F01EC  | 70-0203-3625-4 | 7010339276 | 9.7 in.     | 0.1µm        | DOE EPR                                     |
| EMZ010F02EA  | 70-0203-3934-0 | 7010340569 | 9.7 in.     | 0.1µm        | DOE Silicone                                |
| EMZ010F01CA  | 70-0203-3597-5 | 7010381821 | 10 in.      | 0.1µm        | 222 Spear Silicone                          |
| EMZ010F01CC  | 70-0203-3600-7 | 7010339269 | 10 in.      | 0.1µm        | 222 Spear EPR                               |
| EMZ010F01FA  | 70-0203-3648-6 | 7010381844 | 10 in.      | 0.1µm        | 222 Flat Cap Silicone                       |
| EMZ010F01FC  | 70-0203-3663-5 | 7100089948 | 10 in.      | 0.1µm        | 222 Flat Cap EPR                            |
| EMZ010F01FH  | 70-0203-3690-8 | 7010315751 | 10 in.      | 0.1µm        | 222 Flat Cap Clear Silicone                 |
| EMZ010F01FK  | 70-0203-3691-6 | 7100089938 | 10 in.      | 0.1µm        | 222 Flat Cap PTFE Encapsulated Fluorocarbon |
| EMZ010F02EC  | 70-0203-3630-4 | 7010303368 | 19.5 in.    | 0.1µm        | DOE EPR                                     |
| EMZ010F02BA  | 70-0203-3592-6 | 7100089952 | 20 in.      | 0.1µm        | 226 Spear Silicone                          |
| EMZ010F02BB  | 70-0203-3594-2 | 7100100617 | 20 in.      | 0.1µm        | 226 Spear Fluorocarbon                      |
| EMZ010F02CA  | 70-0203-3987-8 | 7010383154 | 20 in.      | 0.1µm        | 222 Spear Silicone                          |
| EMZ010F02CB  | 70-0203-3602-3 | 7010381823 | 20 in.      | 0.1µm        | 222 Spear Fluorocarbon                      |
| EMZ010F02CC  | 70-0203-3603-1 | 7100127373 | 20 in.      | 0.1µm        | 222 Spear EPR                               |
| EMZ010F02CH  | 70-0203-3605-6 | 7100089954 | 20 in.      | 0.1µm        | 222 Spear Clear Silicone                    |
| EMZ010F02FA  | 70-0203-3640-3 | 7010381840 | 20 in.      | 0.1µm        | 222 Flat Cap Silicone                       |
| EMZ010F02FB  | 70-0203-3655-1 | 7100089925 | 20 in.      | 0.1µm        | 222 Flat Cap Fluorocarbon                   |
| EMZ010F02FC  | 70-0203-3656-9 | 7100089945 | 20 in.      | 0.1µm        | 222 Flat Cap EPR                            |
| EMZ010F02FK  | 70-0203-3695-7 | 7100089939 | 20 in.      | 0.1µm        | 222 Flat Cap PTFE Encapsulated Fluorocarbon |
| EMZ010F03EA  | 70-0203-3634-6 | 7010315745 | 29.2 in.    | 0.1µm        | DOE Silicone                                |
| EMZ010F03CA  | 70-0203-3988-6 | 7010340571 | 30 in.      | 0.1µm        | 222 Spear Silicone                          |
| EMZ010F03CB  | 70-0203-3609-8 | 7010381826 | 30 in.      | 0.1µm        | 222 Spear Fluorocarbon                      |
| EMZ010F03CH  | 70-0203-3611-4 | 7010381827 | 30 in.      | 0.1µm        | 222 Spear Clear Silicone                    |
| EMZ010F03FA  | 70-0203-3644-5 | 7010381842 | 30 in.      | 0.1µm        | 222 Flat Cap Silicone                       |
| EMZ010F03FC  | 70-0203-3660-1 | 7100089947 | 30 in.      | 0.1µm        | 222 Flat Cap EPR                            |
| EMZ010F03FH  | 70-0203-3698-1 | 7010381859 | 30 in.      | 0.1µm        | 222 Flat Cap Clear Silicone                 |
| EMZ010F04CB  | 70-0203-3700-5 | 7010381860 | 40 in.      | 0.1µm        | 222 Spear Fluorocarbon                      |
| EMZ010F03FB  | 70-0203-3647-8 | 7010339382 | 40 in.      | 0.1µm        | 222 Flat Cap Fluorocarbon                   |
| EMZ010F04BC  | 70-0203-3699-9 | 7100089929 | 40 in.      | 0.1µm        | 226 Spear EPR                               |
| EMZ010F04CH  | 70-0203-3617-1 | 7010381830 | 40 in.      | 0.1µm        | 222 Spear Clear Silicone                    |
| EMZ020F01EA  | 70-0203-3623-9 | 7100089919 | 9.7 in.     | 0.2µm        | DOE Silicone                                |
| EMZ020F01EB  | 70-0203-3931-6 | 7010413617 | 9.7 in.     | 0.2µm        | DOE Fluorocarbon                            |
| EMZ020F01EC  | 70-0203-3932-4 | 7010293343 | 9.7 in.     | 0.2µm        | DOE EPR                                     |
| EMZ020F01BA  | 70-0203-3589-2 | 7100089950 | 10 in.      | 0.2µm        | 226 Spear Silicone                          |
| EMZ020F01CA  | 70-0203-3598-3 | 7100089953 | 10 in.      | 0.2µm        | 222 Spear Silicone                          |
| EMZ020F01CB  | 70-0203-3599-1 | 7010381822 | 10 in.      | 0.2µm        | 222 Spear Fluorocarbon                      |
| EMZ020F01CC  | 70-0203-3601-5 | 7010303366 | 10 in.      | 0.2µm        | 222 Spear EPR                               |
| EMZ020F01DA  | 70-0203-3619-7 | 7010381831 | 10 in.      | 0.2µm        | DOE Silicone                                |
| EMZ020F01FA  | 70-0203-3639-5 | 7100089930 | 10 in.      | 0.2µm        | 222 Flat Cap Silicone                       |
| EMZ020F01FB  | 70-0203-3650-2 | 7100089955 | 10 in.      | 0.2µm        | 222 Flat Cap Fluorocarbon                   |
| EMZ020F01FC  | 70-0203-3651-0 | 7010381845 | 10 in.      | 0.2µm        | 222 Flat Cap EPR                            |
| EMZ020F01FK  | 70-0203-3652-8 | 7100089933 | 10 in.      | 0.2µm        | 222 Flat Cap PTFE Encapsulated Fluorocarbon |
| EMZ020F02EA  | 70-0203-3629-6 | 7100089922 | 19.5 in.    | 0.2µm        | DOE Silicone                                |
| EMZ020F02BA  | 70-0203-3593-4 | 7010339267 | 20 in.      | 0.2µm        | 226 Spear Silicone                          |
| EMZ020F02CA  | 70-0203-3989-4 | 7010383155 | 20 in.      | 0.2µm        | 222 Spear Silicone                          |
| EMZ020F02CC  | 70-0203-3604-9 | 7010381824 | 20 in.      | 0.2µm        | 222 Spear EPR                               |
| EMZ020F02CH  | 70-0203-3606-4 | 7010381825 | 20 in.      | 0.2µm        | 222 Spear Clear Silicone                    |
| EMZ020F02DA  | 70-0203-3620-5 | 7010315743 | 20 in.      | 0.2µm        | DOE Silicone                                |

### 3M™ LifeASSURE™ EMZ Series Filter Cartridge Ordering Guide (cont.)

| Model Number | 3M ID          | Global ID  | Description |              |                           |
|--------------|----------------|------------|-------------|--------------|---------------------------|
|              |                |            | Length      | Rating (abs) | End Treatments            |
| EMZ020F02EC  | 70-0203-3935-7 | 7010415480 | 20 in.      | 0.2µm        | DOE EPR                   |
| EMZ020F02FA  | 70-0203-3641-1 | 7100089931 | 20 in.      | 0.2µm        | 222 Flat Cap Silicone     |
| EMZ020F02FB  | 70-0203-3643-7 | 7010339381 | 20 in.      | 0.2µm        | 222 Flat Cap Fluorocarbon |
| EMZ020F02FC  | 70-0203-3657-7 | 7100089946 | 20 in.      | 0.2µm        | 222 Flat Cap EPR          |
| EMZ020F03EA  | 70-0203-3635-3 | 7010381838 | 29.2 in.    | 0.2µm        | DOE Silicone              |
| EMZ020F03BA  | 70-0203-3595-9 | 7010381820 | 30 in.      | 0.2µm        | 226 Spear Silicone        |
| EMZ020F03BB  | 70-0203-3596-7 | 7100089916 | 30 in.      | 0.2µm        | 226 Spear Fluorocarbon    |
| EMZ020F03CA  | 70-0203-3608-0 | 7010290317 | 30 in.      | 0.2µm        | 222 Spear Silicone        |
| EMZ020F03CB  | 70-0203-3610-6 | 7010339272 | 30 in.      | 0.2µm        | 222 Spear Fluorocarbon    |
| EMZ020F03CH  | 70-0203-3612-2 | 7010315742 | 30 in.      | 0.2µm        | 222 Spear Clear Silicone  |
| EMZ020F03EC  | 70-0203-3939-9 | 7010410035 | 30 in.      | 0.2µm        | DOE EPR                   |
| EMZ020F03FA  | 70-0203-3645-2 | 7010303369 | 30 in.      | 0.2µm        | 222 Flat Cap Silicone     |
| EMZ020F04CA  | 70-0203-3614-8 | 7010339273 | 40 in.      | 0.2µm        | 222 Spear Silicone        |
| EMZ020F04CC  | 70-0203-3616-3 | 7100089917 | 40 in.      | 0.2µm        | 222 Spear EPR             |
| EMZ020F04CH  | 70-0203-3618-9 | 7010339274 | 40 in.      | 0.2µm        | 222 Spear Clear Silicone  |
| EMZ045F01EA  | 70-0203-3624-7 | 7100089920 | 9.7 in.     | 0.45µm       | DOE Silicone              |
| EMZ045F01EB  | 70-0203-3933-2 | 7010383151 | 9.7 in.     | 0.45µm       | DOE Fluorocarbon          |
| EMZ045F01EC  | 70-0203-4183-3 | 7010383284 | 9.7 in.     | 0.45µm       | DOE EPR                   |
| EMZ045F01BA  | 70-0203-3590-0 | 7100089951 | 10 in.      | 0.45µm       | 226 Spear Silicone        |
| EMZ045F01BC  | 70-0203-3591-8 | 7010315739 | 10 in.      | 0.45µm       | 226 Spear EPR             |
| EMZ045F02FB  | 70-0203-4012-4 | 7010296136 | 20 in.      | 0.45µm       | 222 Flat Cap Fluorocarbon |
| EMZ045F02BA  | 70-0203-4113-0 | 7010314553 | 20 in.      | 0.45µm       | 226 Spear Silicone        |
| EMZ045F02CA  | 70-0203-4176-7 | 7010340688 | 20 in.      | 0.45µm       | 222 Spear Silicone        |
| EMZ045F02CH  | 70-0203-3607-2 | 7010339271 | 20 in.      | 0.45µm       | 222 Spear Clear Silicone  |
| EMZ045F02DA  | 70-0203-3621-3 | 7010381832 | 20 in.      | 0.45µm       | DOE Silicone              |
| EMZ045F02EA  | 70-0203-3936-5 | 7010413618 | 20 in.      | 0.45µm       | DOE Silicone              |
| EMZ045F02EB  | 70-0203-3937-3 | 7010383152 | 20 in.      | 0.45µm       | DOE Fluorocarbon          |
| EMZ045F02EC  | 70-0203-3938-1 | 7010314548 | 20 in.      | 0.45µm       | DOE EPR                   |
| EMZ045F02FA  | 70-0203-3642-9 | 7100089932 | 20 in.      | 0.45µm       | 222 Flat Cap Silicone     |
| EMZ045F02FC  | 70-0203-3658-5 | 7010381847 | 20 in.      | 0.45µm       | 222 Flat Cap EPR          |
| EMZ045F03CA  | 70-0203-3990-2 | 7010314549 | 30 in.      | 0.45µm       | 222 Spear Silicone        |
| EMZ045F03CH  | 70-0203-3613-0 | 7010381828 | 30 in.      | 0.45µm       | 222 Spear Clear Silicone  |
| EMZ045F03EA  | 70-0203-3940-7 | 7010383153 | 30 in.      | 0.45µm       | DOE Silicone              |
| EMZ045F03FA  | 70-0203-3646-0 | 7010381843 | 30 in.      | 0.45µm       | 222 Flat Cap Silicone     |

**Intended Use and Product Selection:** 3M™ LifeASSURE™ EMZ Series Filter cartridges are intended for use in industrial and high purity chemical filtration applications of aqueous fluids in accordance with the applicable product instructions and specifications. 3M LifeASSURE EMZ Series Filter cartridges are also intended for use with non-aqueous fluids where materials of construction are compatible. Since there are many factors that can affect a product's use, the customer and user remain responsible for determining whether the 3M product is suitable and appropriate for the user's specific application, including user conducting an appropriate risk assessment and evaluating the 3M product in user's application.

**Restrictions on Use:** 3M advises against the use of these 3M products in any application other than the stated intended use(s), since other applications have not been evaluated by 3M and may result in an unsafe or unintended condition. Do not use in any manner whereby the 3M product, or any extractable or leachable from the 3M product, may become part of or remains in a medical device, drug, cosmetic supplement, infant formula; or in applications involving life-sustaining medical applications or prolonged contact with internal bodily fluids or tissues.

3M™ LifeASSURE™ EMZ Series Filter cartridges products are not for use in food contact applications.

**Technical Information:** The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.

**Product Selection and Use:** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

**Warranty, Limited Remedy, and Disclaimer:** Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

**Limitation of Liability:** Except for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.



Your local distributor:

3M Purification Inc.  
3M Separation and Purification Sciences Division  
400 Research Parkway  
Meriden, CT 06450 USA

Phone 1-800-243-6894  
1-203-237-5541  
Web 3MPurification.com

3M and LifeASSURE are trademarks of 3M Company.  
©2023 3M Company. All rights reserved. Please recycle. Printed in U.S.A.  
70020338821 REV 0423