

## Data Sheet

# Polygard® CT Filters

Cost effective cartridge filters with outstanding performance in clarification and pretreatment

Polygard® CT cartridge filters are composed of graded-density polypropylene media designed for a wide range of liquid primary clarification applications. Typical uses include DI water pretreatment, solvent clarification and the primary clarification step for paints, varnishes, metallic coatings, inks, flavorings, petrochemicals, dyes, wine, beer, soft drinks, cosmetics, pulp and paper chemical adjuncts and most effluents.

## Applications

- Food & Beverage
- DI water pretreatment
- Paints
- Varnishes
- Metallic coatings
- Inks
- Flavorings
- Petrochemicals
- Dyes
- Cosmetics
- Pulp and paper chemical adjuncts
- Most effluents



## Retention Efficiency

Polygard® CT cartridge filters are rated for retention efficiencies and are based upon Beta Ratio values for the stated nominal micron ratings.

## Cost Effective

The graded density format of Polygard® CT cartridge filters allows media with two distinct nominal pore size cutoffs to be wrapped into one cartridge. This technique maximizes dirt-holding capacity while affording extremely low differential pressures offering a long service life.

## Versatility

Polygard® CT cartridge filters are manufactured from melt-blown 100% virgin polypropylene to provide wide chemical compatibility. For traceability and identification, the cartridges are labeled with lot number.

## Downstream Cleanliness

The filters are highly resistant to pressure fluctuations without demonstrating media migration or contaminant unloading.

## Regulatory Compliance

Polygard® CT filters are designed, developed, and manufactured in accordance with a Quality Management System approved by an accredited registering body to an ISO® 9000 Quality Systems Standard and are shipped with a Certificate of Quality.

## Media Types

Polygard® CT (nominal)

- 1.0 µm
- 5.0 µm
- 10.0 µm
- 25.0 µm
- 50.0 µm
- 75.0 µm
- 100.0 µm
- 150.0 µm

Filter Formats

- Cartridge filters

## Cartridge Filters

Polygard® CT cartridge filters are available in multiple filtration sizes providing an optimal choice for every application. A wide range of filter sizes is available to fit all of your application needs from process development work of your small volume filtration steps to larger, full-scale filtration processes.

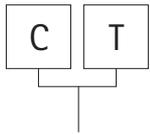
Small scale filter capsules are available for use as a selection tool when evaluating several media configurations for use to clarify process fluid. These devices have been developed to minimize hold-up volume when evaluating these multiple media configurations.

## Specifications

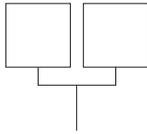
	Small Scale Filter Capsules	Cartridge Filters
<b>Nominal dimensions</b>		
Maximum length	118.0 mm (4.6 in.)	255.0 mm (10.0 in.)
Diameter	88 mm (3.5 in.) O.D.	7.0 cm (2.8 in.) O.D.
Filter element length	25 mm (1 in.)	—
<b>Materials of construction</b>		
Filter media	Polypropylene	100% virgin polypropylene media
Core	—	Glass fiber reinforced polypropylene or 100% polypropylene
Structural components	Polypropylene	—
End caps	—	Polyethylene
<b>Vent/drain</b>	1/4 in. hose barb	—
<b>Maximum Operating Temperature</b>	60 °C	80 °C
<b>Maximum Differential Pressure</b>	—	4.8 bar (70 psid) at 25 °C
<b>Pyrogenicity</b>	—	Non-pyrogenic by LAL testing
<b>Component Material Toxicity</b>	—	All component materials are nontoxic per current USP Class VI Biological Test for Plastics. Polygard® CT filter cartridges meet the requirements of the current USP Mouse Safety Test.
<b>Typical Flow Rates</b>	—	CT01: 60 l/min at a differential pressure of 100 mbar at 25 °C per 10" element. CT05 to CT75: 60 l/min at a differential pressure of 45 mbar at 25 °C per 10" element.

## Ordering Information

### CT Cartridge Filters



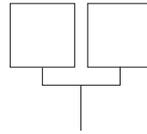
**CT= Polygard® CT**  
Graded Density  
Polypropylene  
Depth



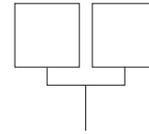
**Pore Size**  
01=1.0µm  
05=5.0µm  
10=10.0µm  
25=25.0µm  
50=50.0µm  
75=75.0µm  
99 =100.0µm  
C5=150.0µm



**Cartridge Code**  
0=Code 0 (2-222)  
0-Ring  
5=Code 5 (2-222)  
0-Ring with Spear  
7=Code 7 (2-226)  
0-Ring with Spear  
F=Double Open End,  
flat gasket  
M = (2-118) O-ring  
(2 in. cartridge only)

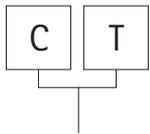


**Cartridge Length**  
02=2"  
10=10"  
20=20"  
30=30"  
40=40"

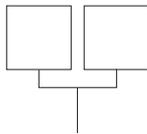


**Quantity per Package**  
03 = 3 per package (2 in. only)  
25=25/pk (20", 30", 40")  
50=50/pk (10")

### Small Scale Filter Capsules



**CT= Polygard® CT**  
Graded Density  
Polypropylene  
Depth



**Pore Size**  
K1 = 0.1 µm  
K3 = 0.3 µm  
A5 = 0.5 µm  
01 = 1.0 µm  
03 = 3.0 µm  
05 = 5.0 µm  
10 = 10.0 µm  
25 = 25.0 µm  
50 = 50.0 µm  
75 = 75.0 µm  
99 = 100.0 µm



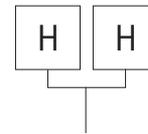
**Not Autoclavable**



**Capsule Length**  
1=1"



**Filter Length**  
1=1"



**Connection Type**  
HH=Hose Barb



**Quantity per Package**  
1=1/pack

## To Place an Order or Receive Technical Assistance

In Europe, please call Customer Service:

France: 0825 045 645

Germany: 01805 045 645

Italy: 848 845 645

Spain: 901 516 645 Option 1

Switzerland: 0848 645 645

United Kingdom: 0870 900 4645

For other countries across Europe,  
please call: +44 (0) 115 943 0840

Or visit: [www.merckmillipore.com/offices](http://www.merckmillipore.com/offices)

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