

CANNULA FILTERS

THE CANNULA FILTER

Almost every dissolution test relies on samples being taken to produce a result. Filters are used to prevent particles of tablet from getting into the sample and affecting the spectrophotometer or HPLC results.

Filters should be shown not to absorb any compounds of interest.

All filters are U.S. Pharmacopeia compliant where applicable and meet machine manufacturer specifications.

GUARANTEED CHROMIUM AND HEAVY METAL FREE

Our PureQuality certification program guarantees our filters not to have any Chromium, heavy metals, material contaminants or inorganic elemental interference. These are the purest and highest quality filters available today.



KEY CONSIDERATIONS

Most manufacturers use a filter on the end of the sampling cannula. These cannula filters are made of Ultra High Molecular Weight (UHMW) Polyethylene and are completely inert to most compounds.

With filters, porosities are nominal and represent an average pore size rather than an absolute pore size. Thus a 35µm and 40µm filter will perform in much the same way.

If in-line filters are used it is important that a small amount of media is pushed back in the reverse direction to wash particles off the filter back into the vessel. Particles are part of the tablet and as such should be kept inside the vessel dissolving with the rest of the tablet.

Failure to do this results in the particles staying on the filter. The effect of this is not only to remove the particles from the media but next time a sample is taken, the media is pulled through the particles stuck to the filter which can give erroneously high readings.

When selecting a filter, it is wise to conduct some tests to ensure that there is no sample absorption onto the filter. If this is a problem then alternative filters and materials are available but external filtration may be required.

Types of Filters:

- **Cannula Filters** — Cannula Filters generally have a large surface area and may affect the hydrodynamics in the vessel. However they have a good flow rate and may be used when high levels of particulates are present to prevent particulates blocking the sample probes. A large porosity range is available. Different manufacturers recommend different filters for use with their sampling cannula and not all are interchangeable because of differences in cannula diameter.
- **Filter Discs** — Some low volume sample probes require an In-Line Filter Disc (or filter frit) which has a lower surface area than a cannula filter. These are designed to keep the filtration process outside the vessel but may suffer from blocking due to the lower surface area. These are designed to keep the filtration process outside the vessel but blockages may occur due to the lower surface area.
- **Filter Tips** — Filter Tips are smaller than cannula filters and fit on the end of larger diameter sample probes.



FULL FLOW FILTERS
AGILENT/VANKEL
AND DISTEK DV SERIES
AUTO-SAMPLER PROBES
(see page 31 and 35)



CANNULA FILTERS
(see All Manufacturers
pages 35 - 37)



FILTER TIPS
(see Agilent/VanKel page 35)



FILTER DISCS
(see Distek page 35)

Agilent and Legacy VanKel baths normally use either cannula style full flow filters or filter tips. *With Direct Fit, no tygon tubing needed.

Part No.	Description	OEM Ref
FIL001-01	1 Micron Full Flow Filters, UHMW Polyethylene (Jar/1000)	QLA
FIL001-01-a	1 Micron Full Flow Filters, UHMW Polyethylene (Pack/100)	QLA
FIL002-01	2 Micron Full Flow Filters, UHMW Polyethylene (Jar/1000)	QLA
FIL002-01-a	2 Micron Full Flow Filters, UHMW Polyethylene (Pack/100)	QLA
FIL010-01	10 Micron Full Flow Filters, UHMW Polyethylene (Jar/1000)	17-4005
FIL010-01-a	10 Micron Full Flow Filters, UHMW Polyethylene (Pack/100)	17-4000
FIL010-VK	10 Micron Full Flow Filters, UHMW Polyethylene, Direct Fit* (Jar/1000)	QLA
FIL010-VK-a	10 Micron Full Flow Filters, UHMW Polyethylene, Direct Fit* (Pack/100)	QLA
FIL020-01	20 Micron Full Flow Filters, UHMW Polyethylene (Jar/1000)	QLA
FIL020-01-a	20 Micron Full Flow Filters, UHMW Polyethylene (Pack/100)	QLA
FIL035-01	35 Micron Full Flow Filters, UHMW Polyethylene (Jar/1000)	17-4015
FIL035-01-a	35 Micron Full Flow Filters, UHMW Polyethylene (Pack/100)	17-4010
FIL035-VK	35 Micron Full Flow Filters, UHMW Polyethylene, Direct Fit* (Jar/1000)	QLA
FIL035-VK-a	35 Micron Full Flow Filters, UHMW Polyethylene, Direct Fit* (Pack/100)	QLA
FIL045-01	45 Micron Full Flow Filters, UHMW Polyethylene (Jar/1000)	QLA
FIL045-01-a	45 Micron Full Flow Filters, UHMW Polyethylene (Pack/100)	QLA
FIL045-VK	45 Micron Full Flow Filters, UHMW Polyethylene, Direct Fit* (Jar/1000)	QLA
FIL045-VK-a	45 Micron Full Flow Filters, UHMW Polyethylene, Direct Fit* (Pack/100)	QLA
FIL070-01	70 Micron Full Flow Filters, UHMW Polyethylene (Jar/1000)	17-4025
FIL070-01-a	70 Micron Full Flow Filters, UHMW Polyethylene (Pack/100)	17-4020
FIL070-VK	70 Micron Full Flow Filters, UHMW Polyethylene, Direct Fit* (Jar/1000)	QLA
FIL070-VK-a	70 Micron Full Flow Filters, UHMW Polyethylene, Direct Fit* (Pack/100)	QLA
FILTIP-02	2 Micron Filter Tips (Jar/1000)	17-4100
FILTIP-05	5 Micron Filter Tips (Jar/1000)	17-4110
FILTIP-10	10 Micron Filter Tips (Jar/1000)	17-4120
FILTIP-20	20 Micron Filter Tips (Jar/1000)	17-4130
FILTIP-45	45 Micron Filter Tips (Jar/1000)	17-4140



**AGILENT/VANKEL
CANNULA FILTERS**



**AGILENT/VANKEL
FILTER TIPS**

**Tygon Tubing Troubles?
Go for a Direct Fit!**

Try QLA's VK series Full Flow Filters. These filters have been designed to fit directly onto the end of the standard Agilent/VanKel style manual and automated cannula. No tygon tubing needed! Ask your QLA Sales Rep for more information.

Distek baths utilize a resident sampling probe that incorporates a small filter disc. An external end tip filter may also be used instead of, or in addition to the filter disc. For DV Series Auto-Sampler Probe Filters, see page 31.

Part No.	Description	OEM Ref
FIL010-DK	10 Micron Filter Discs, UHMW Polyethylene (Jar/1000)	5720-0203-1000
FIL010-DK-a	10 Micron Filter Discs, UHMW Polyethylene (Pack/100)	QLA
FIL035-DK	35 Micron Filter Discs, UHMW Polyethylene (Jar/1000)	5720-0235
FIL045-DK	45 Micron Filter Discs, UHMW Polyethylene (Jar/1000)	5720-0275-1000
FIL045-DK-a	45 Micron Filter Discs, UHMW Polyethylene (Pack/100)	QLA
FIL070-DK	70 Micron Filter Discs, UHMW Polyethylene (Jar/1000)	QLA
FIL070-DK-a	70 Micron Filter Discs, UHMW Polyethylene (Pack/100)	QLA
FIL090-DK	90 Micron Filter Discs, UHMW Polyethylene (Jar/1000)	QLA
FIL090-DK-a	90 Micron Filter Discs, UHMW Polyethylene (Pack/100)	QLA
FIL10S-DK	10 Micron Porous Filters, UHMW Polyethylene, 1/16" (Jar/1000)	5720-0501
FIL10S-DK-a	10 Micron Porous Filters, UHMW Polyethylene, 1/16" (Pack/100)	5720-0500
FIL20S-DK	20 Micron Porous Filters, UHMW Polyethylene, 1/16" (Jar/1000)	5720-0240-1000
FIL20S-DK-a	20 Micron Porous Filters, UHMW Polyethylene, 1/16" (Pack/100)	5720-0240-100
FIL35S-DK	35 Micron Porous Filters, UHMW Polyethylene, 1/16" (Jar/1000)	5720-0220-1000
FIL35S-DK-a	35 Micron Porous Filters, UHMW Polyethylene, 1/16" (Pack/100)	5720-0220-100
FIL45S-DK	45 Micron Porous Filters, UHMW Polyethylene, 1/16" (Jar/1000)	5720-0020-1000
FIL45S-DK-a	45 Micron Porous Filters, UHMW Polyethylene, 1/16" (Pack/100)	5720-0020-100
FIL70S-DK	70 Micron Porous Filters, UHMW Polyethylene, 1/16" (Jar/1000)	5720-0503
FIL70S-DK-a	70 Micron Porous Filters, UHMW Polyethylene, 1/16" (Pack/100)	5720-0502



**DISTEK
FILTER DISCS**



**DISTEK
CANNULA FILTERS**

ERWEKA COMPATIBLE CANNULA FILTERS

Erweka baths normally use 1/8" (3.2mm) cannula style filters with a large range of porosities.

Part No.	Description	OEM Ref
FIL001-EW	1 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	70-000-2999
FIL001-EW-a	1 Micron Porous Filters, UHMW Polyethylene (Pack/100)	70-000-2100
FIL004-EW	4 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	70-000-3999
FIL004-EW-a	4 Micron Porous Filters, UHMW Polyethylene (Pack/100)	70-000-3100
FIL010-EW	10 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	70-000-4999
FIL010-EW-a	10 Micron Porous Filters, UHMW Polyethylene (Pack/100)	70-000-4100
FIL020-EW	20 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	70-000-5999
FIL020-EW-a	20 Micron Porous Filters, UHMW Polyethylene (Pack/100)	70-000-5100
FIL035-EW	35 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	QLA
FIL035-EW-a	35 Micron Porous Filters, UHMW Polyethylene (Pack/100)	QLA
FIL040-EW	40 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	QLA
FIL040-EW-a	40 Micron Porous Filters, UHMW Polyethylene (Pack/100)	QLA
FIL070-EW	70 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	QLA
FIL070-EW-a	70 Micron Porous Filters, UHMW Polyethylene (Pack/100)	QLA



ERWEKA
CANNULA FILTERS

HANSON COMPATIBLE CANNULA FILTERS

Hanson Research baths use cannula style filters. The Hanson/Waters Dissolution/HPLC interface uses a 1/16" (1.6mm) narrow bore filter instead of the normal 1/8" (3.2mm) diameter.

Part No.	Description	OEM Ref
FIL001-HR	1 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	27-101-097
FIL001-HR-a	1 Micron Porous Filters, UHMW Polyethylene (Pack/100)	27-101-087
FIL004-HR	4 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	27-101-098
FIL004-HR-a	4 Micron Porous Filters, UHMW Polyethylene (Pack/100)	27-101-088
FIL010-HR	10 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	27-101-091
FIL010-HR-a	10 Micron Porous Filters, UHMW Polyethylene (Pack/100)	27-101-074
FIL020-HR	20 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	QLA
FIL020-HR-a	20 Micron Porous Filters, UHMW Polyethylene (Pack/100)	QLA
FIL035-HR	35 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	27-101-095
FIL035-HR-a	35 Micron Porous Filters, UHMW Polyethylene (Pack/100)	27-101-085
FIL045-HR	45 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	QLA
FIL045-HR-a	45 Micron Porous Filters, UHMW Polyethylene (Pack/100)	27-101-089
FIL070-HR	70 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	27-101-092
FIL070-HR-a	70 Micron Porous Filters, UHMW Polyethylene (Pack/100)	27-101-082
FIL10S-HR	10 Micron Porous Filters, UHMW Polyethylene, 1/16" (Jar/1000)	27-101-093
FIL10S-HR-a	10 Micron Porous Filters, UHMW Polyethylene, 1/16" (Pack/100)	27-101-083
FIL20S-HR	20 Micron Porous Filters, UHMW Polyethylene, 1/16" (Jar/1000)	QLA
FIL20S-HR-a	20 Micron Porous Filters, UHMW Polyethylene, 1/16" (Pack/100)	QLA
FIL35S-HR	35 Micron Porous Filters, UHMW Polyethylene, 1/16" (Jar/1000)	27-101-096
FIL35S-HR-a	35 Micron Porous Filters, UHMW Polyethylene, 1/16" (Pack/100)	27-101-086
FIL45S-HR	45 Micron Porous Filters, UHMW Polyethylene, 1/16" (Jar/1000)	QLA
FIL45S-HR-a	45 Micron Porous Filters, UHMW Polyethylene, 1/16" (Pack/100)	27-101-090
FIL70S-HR	70 Micron Porous Filters, UHMW Polyethylene, 1/16" (Jar/1000)	27-101-094
FIL70S-HR-a	70 Micron Porous Filters, UHMW Polyethylene, 1/16" (Pack/100)	27-101-084



HANSON
CANNULA FILTERS

PHARMATEST COMPATIBLE CANNULA FILTERS

Pharmatest baths normally use 1/8" (3.2mm) cannula style filters with a large range of porosities.

Part No.	Description	OEM Ref
FIL001-PT	1 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	QLA
FIL001-PT-a	1 Micron Porous Filters, UHMW Polyethylene (Pack/100)	QLA
FIL004-PT	4 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	QLA
FIL004-PT-a	4 Micron Porous Filters, UHMW Polyethylene (Pack/100)	QLA
FIL005-PT	5 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	QLA
FIL005-PT-a	5 Micron Porous Filters, UHMW Polyethylene (Pack/100)	31-63511-50
FIL010-PT	10 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	QLA
FIL010-PT-a	10 Micron Porous Filters, UHMW Polyethylene (Pack/100)	31-63211-50
FIL035-PT	35 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	QLA
FIL035-PT-a	35 Micron Porous Filters, UHMW Polyethylene (Pack/100)	QLA
FIL070-PT	70 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	QLA
FIL070-PT-a	70 Micron Porous Filters, UHMW Polyethylene (Pack/100)	QLA



**PHARMATEST
CANNULA FILTERS**

SOTAX COMPATIBLE CANNULA FILTERS

Sotax baths normally use 1/8" (3.2mm) cannula style filters with a large range of porosities.

Part No.	Description	OEM Ref
FIL010-ST	10 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	27-101-091
FIL010-ST-a	10 Micron Porous Filters, UHMW Polyethylene (Pack/100)	27-101-074
FIL020-ST	20 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	QLA
FIL020-ST-a	20 Micron Porous Filters, UHMW Polyethylene (Pack/100)	QLA
FIL035-ST	35 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	27-101-095
FIL035-ST-a	35 Micron Porous Filters, UHMW Polyethylene (Pack/100)	27-101-085
FIL070-ST	70 Micron Porous Filters, UHMW Polyethylene (Jar/1000)	27-101-092
FIL070-ST-a	70 Micron Porous Filters, UHMW Polyethylene (Pack/100)	27-101-082



**SOTAX
CANNULA FILTERS**

CANNULA FILTERS COLOR CODING

Some cannula filters are color coded for easy identification of porosity.

