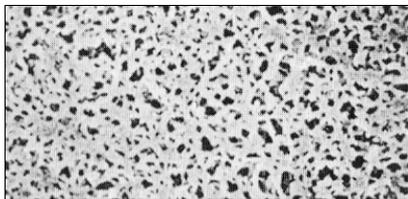


Membrane Filter Discs

Low Adsorption Cellulose Acetate



Membranes with high flow rates, very low adsorption characteristics coupled with thermal stability. This makes the 0.2µm pore size excellently suited for use in disc filter holders to sterilise aqueous solutions, buffers, sera and media.

Specifications:

<i>Bubble points</i>	Max. values wetted with water, 3.5 bar (350 kPa) for 0.2µm, 2.0 bar (200kPa) for 0.45µm, 1.3 bar (130 kPa) for 0.65µm and 0.8 bar (80 kPa) for 0.8µm
<i>Compatibility</i>	Stable within the pH range 4-8 and resistant against most alcohols, hydrocarbons and oils
<i>Extractables</i>	With water less than 1%
<i>Flow rates</i>	Average values for water per cm ² at 1 bar differential pressure, 22ml/min for 0.2µm, 69ml/min for 0.45µm, 130ml/min for 0.65µm and 200ml/min for 0.8µm
<i>Limits</i>	Max temp 180°C
<i>Material</i>	Cellulose acetate
<i>Sterilisation</i>	By autoclaving at 121°C or 134°C, with γ-radiation or ethylene oxide
<i>Thickness</i>	Average value 135µm

Order numbers for 13mm cellulose acetate filter discs type 111

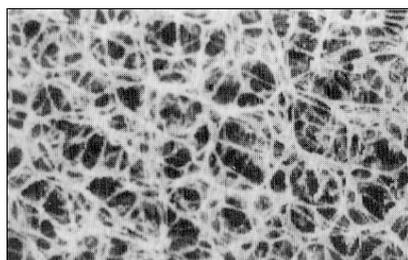
F292	Filter membrane 13mm Ø, 0.8µm pore size white, plain	pack of 100
F122	Filter membrane 13mm Ø, 0.45µm pore size white, plain	pack of 100
F124	Filter membrane 13mm Ø, 0.2µm pore size white, plain	pack of 100

25mm filter discs

F293	Filter membrane 25mm Ø, 0.8µm pore size white, plain	pack of 100
F294	Filter membrane 25mm Ø, 0.65µm pore size white, plain	pack of 100
F123	Filter membrane 25mm Ø, 0.45µm pore size white, plain	pack of 100
F125	Filter membrane 25mm Ø, 0.2µm pore size white, plain	pack of 100

Other diameters available - 30mm, 47mm, 50mm, 85mm, 90mm, 100mm, 142mm, 293mm. Please ask.

RC Membrane Discs for Organic Solvents



Hydrophilic membrane discs for the removal of particles from solvents see list page 4.1.

Specifications

<i>Adsorption</i>	Approx. 24µg/cm ² for 0.2µm pore size, 18µg/cm ² for 0.45µm pore size
<i>Compatibility</i>	See list page 4.1. Also resistant to aqueous solutions pH 3-12
<i>Extractables</i>	With water less than 1%
<i>Flow rates</i>	Average values per cm ² area for water at 1 bar (100kPa) pressure, 20ml/min for 0.2µm, 47ml/min for 0.45µm
<i>Material</i>	Regenerated cellulose, reinforced with non-woven cellulose
<i>Sterilisation</i>	By autoclaving at 121°C or 134°C, dry heat (180°C), γ-radiation or ethylene oxide
<i>Thickness</i>	Average value 160µm

Order numbers for 13mm diameter RC filter membranes type 184

F295	0.45µm	pack of 100
F296	0.2µm	pack of 100
25mm filter discs		
F297	0.45µm	pack of 100
F298	0.2µm	pack of 100

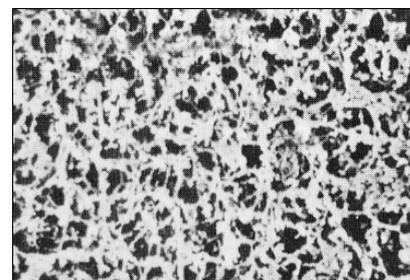
Other sizes available 47mm, 50mm, 100mm, 142mm, 293mm - please ask

Cellulose Nitrate

Cellulose nitrate gives very uniform pore structure over a wide range of pore sizes.

Specifications

<i>Bubble points</i>	On request
<i>Compatibility</i>	Chemically resistant to aqueous solutions in the pH range 4-8, to hydrocarbons and some other organic solvents
<i>Extractables</i>	Less than 1% with water
<i>Flow rates</i>	750ml/min for 8µm pore size 570ml/min for 5µm pore size 430ml/min for 3µm pore size 320ml/min for 1.2µm pore size 130ml/min for 0.65µm pore size 69ml/min for 0.45µm pore size 33ml/min for 0.3µm pore size 22ml/min for 0.2µm pore size 5ml/min for 0.1µm pore size
<i>Heat stability</i>	Do not expose to temperatures above 130°C
<i>Sterilisation</i>	By autoclaving at 121°C, γ -radiation or ethylene oxide
<i>Thickness</i>	Varies with pore size, 90µm (0.1µm) to 140µm (8µm)



Order numbers for 13mm cellulose nitrate filter discs type 113

F135	Filter membrane 13mm Ø 0.45µm pore size, white, plain	pack of 100
F299	Filter membrane 13mm Ø 0.2µm pore size, white, plain	pack of 100

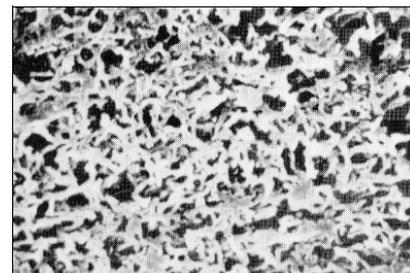
25mm filter discs

F300	Filter membrane 25mm Ø 0.45µm pore size, white, plain	pack of 100
F301	Filter membrane 25mm Ø 0.2µm pore size, white, plain	pack of 100

Additional pore sizes as above specification (see *flow rates*) in other diameters of 20mm, 30mm, 37mm, 40mm, 47mm, 50mm, 80mm, 85mm, 90mm, 100mm, 120mm, 142mm, 150mm, 257mm, 293mm. The 47mm and 50mm filter discs are available in pre-sterilised packs. **Please ask.**

Polyamide Filter Membranes

Type 250 for the filtration of **alkaline solutions** and **organic solvents**. These filters are specified for the isolation of legionella and their high adsorption and good mechanical strength make them very useful for blotting procedures. They are both hydrophilic and chemically resistant to most bases including 1N NaOH so are very good general purpose particle removing or sterilising filters for alkaline solutions. Their compatibility with many organic solvents and their favourable price compared with PTFE membranes, makes them an economical choice for particle removal for HPLC. They are not recommended for applications such as sterilising filtration of tissue culture solutions as their relatively high adsorption could cause loss of important trace substances. For these applications cellulose acetate is best used.



Specification

<i>Extractables</i>	With water less than 0.2%
<i>Compatibility</i>	Stable within pH range 3-14 and resistant to many solvents
<i>Flow rates</i>	Average values per cm ² area for water at 1 bar, 23ml/min for 0.2µm, 46ml/min for 0.45µm
<i>Sterilisation</i>	By autoclaving at 121°C, γ -radiation or ethylene oxide
<i>Thickness</i>	Average value 125µm

Order numbers for 13mm diameter polyamide type 250 filters

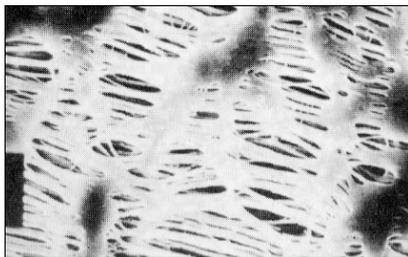
F302	0.45µm	pack of 100
F303	0.2µm	pack of 100

25mm diameter filters

F304	0.45µm	pack of 100
F305	0.2µm	pack of 100

Other diameters available - 47mm, 50mm, 90mm, 142mm, 293mm **please ask**

PTFE Membrane Filters



Type 118 **hydrophobic** membranes for the filtration of **air, gases** and **chemicals**.

These membranes are made purely from PTFE. They allow unhindered passage of moist air or other gases even at low differential pressures as, unlike the hydrophilic membranes, they are not wetted and blocked by the moisture.

The extreme chemical resistance of PTFE makes these filters very useful for the filtration of those solvents or aggressive chemicals for which other membranes are unsuitable. When used for filtration of aqueous solutions they must be pre-wetted with a solvent such as ethanol or isopropanol before water passage can occur.

Specifications

<i>Adsorption</i>	8µg/cm ² for χ -globulin for 0.2µm pore size
<i>Compatibility</i>	Resistant to almost all solvents and chemicals
<i>Extractables</i>	With water none detectable
<i>Flow rates</i>	Average values per cm ² area for air at p=0.05 bar. 0.2l/min for 0.2µm, 0.3l/min for 0.45, 1.6l/min for 1.2µm and 4l/min for 5µm
<i>Sterilisation</i>	By autoclaving at 121°C or 131°C, χ -radiation or with ethylene oxide
<i>Thickness</i>	Average value from 65µm for 0.2µm pore size to 100µm for 5µm

Order numbers for 13mm PTFE filters type 118

F306	1.2µm pore size	pack of 100
F307	0.45µm pore size	pack of 100
F308	0.2µm pore size	pack of 100

25mm diameter PTFE membrane

F309	5µm pore size	pack of 100
F310	1.2µm pore size	pack of 100
F311	0.45µm pore size	pack of 100
F312	0.2µm pore size	pack of 100