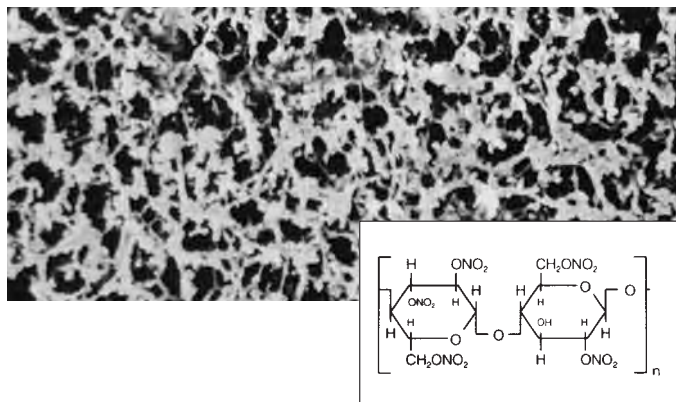


3. Membrane Types | 3.1 Cellulose Nitrate Membranes Type 11303 | 11302 | 11342 | 11301; white, large pore sizes



Description

Cellulose nitrate membrane filters with larger pore sizes are indicated for many purposes where a membrane with a high non-specific adsorption is suitable but a small pore size is not required.

Color

White, no grid.

Material

Cellulose nitrate (cellulose ester)

Reaction to Water

Hydrophilic

Pore Size (Nominal)

11303 1.2 μm
11302 3 μm
11342 5 μm
11301 8 μm

Structure

Symmetric

Applications and Features

Typical Applications

Cell retention, diagnostic kits, particle retention, clear filtration etc.

Special Features

- High flow rate
- High non-specific adsorption

Technical Advantages

Typical Performance

Adsorption, Non-specific

The non-specific adsorption decreases with increasing pore size, see example of γ -globulin

Bubble Point with Water (DIN 58355)

11303 1.0 bar | ~ 14.5 psi
11302 0.5 bar | ~ 7.2 psi
11342 0.5 bar | ~ 7.2 psi
11301 0.3 bar | ~ 4.3 psi

Burst Pressure

for 11342 0.2 bar | ~ 2.9 psi

Chemical Compatibility

Compatible with aqueous solutions (pH 4–8), hydrocarbons and several other organic solvents.

Extractables with Water

< 1%

Flow Rate for Air [L/m²/s 200 Pa] according to*

11303 7.5 l/min
11302 13.5 l/min
11342 24 l/min
11301 41 l/min
corresponding water flow rates
(ml/min at $\Delta p = 1$ bar | ~ 14.5 psi) approx.:
11303 200
11302 430
11342 570
11301 750

Sterilization Methods

Autoclaving at 121°C, ETO sterilization, γ -irradiation (25 kGy)

Thermal Resistance

130°C max.

Thickness (DIN 53105)

Approx. 130 μm

Sterility (AC)

Zero growth

Order Numbers

13 mm diameter:

11342-013N, pack of 100
11342-013N, pack of 100
11301-013 N, pack of 100

25 mm diameter:

11303-025N, pack of 100
11302-025N, pack of 100
11342-025N, pack of 100
11301-025N, pack of 100

37 mm diameter:

11301-037 N, pack of 100

47 mm diameter:

11303-047N, pack of 100
11303-047ACN, pack of 100
individual sterile packed
11302-047N, pack of 100
11302-047ACN, pack of 100
individual sterile packed
11342-047N, pack of 100
13001-047N, pack of 100
11301-047ACN, pack of 100
individual sterile packed

50 mm diameter:

11303-050N, pack of 100
11303-050ACN, pack of 100
individual sterile packed
11302-050N, pack of 100
11302-050ACN, pack of 100
individual sterile packed
11342-050N, pack of 100
11301-050N, pack of 100
11301-050ACN, pack of 100
individual sterile packed

80 mm diameter:

11301-080ALN, pack of 100
not individual sterile packed

90 mm diameter:

11303-090N, pack of 100
11342-090N, pack of 100

142 mm diameter:

11303-142G, pack of 25
11302-142G, pack of 25
11342-142G, pack of 25
11342-142N, pack of 100
11301-142G, pack of 25

293 mm diameter:

11303-293G, pack of 25
11342-293G, pack of 25
11301-293G, pack of 25

* ASTM D737
DIN 53'887
ISO 9'237