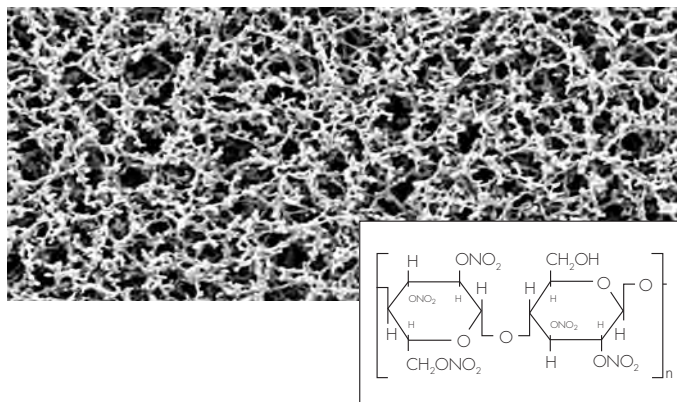


### 3.1 Cellulose Nitrate Membranes Type 11407; White, Black Grid, 0.2 µm



#### Description

Gridded cellulose nitrate filter material is the optimal membrane filter for the microbiological detection of bacteria. The membrane filters with pore size 0.2 µm also allow complete retention and reliable recovery of extremely small water-borne microbes in pharmaceutical applications.

#### Color

White with black grid

#### Material

Cellulose nitrate (cellulose ester)

#### Reaction to Water

Hydrophilic

#### Pore Size (Nominal)

0.2 µm

#### Structure

Symmetric

#### Applications and Features

##### Typical Applications

Detection of the total bacteria count in water for pharmaceutical applications.

##### Special Features

- Fine, uniform pore structure
- High, non-specific adsorption.

##### Technical Advantages

Provides optimal growth characteristics for microorganisms and absolute retention of all bacteria.

#### Typical Performance

##### Non-specific Adsorption

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

##### Chemical Compatibility

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

##### Flow Rate for Water per cm<sup>2</sup> (DIN 58355)

20 ml/min at Δp = 1 bar | ~ 15 psi

##### Sterilization Methods

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

##### Thermal Resistance

130°C max.

##### Thickness (acc. to DIN 53105)

115–145 µm

##### Growth Promotion Test (ISO 7704)

Bacterial recovery testing has shown that the grid lines do not enhance or inhibit the growth of microorganisms. Recovery rates of total and coliform bacteria indicate that there is no influence on bacterial growth and development due to chemical extractables.

##### pH of Filter Extract

< 8.3

##### Coliform Retention

100%

##### Recovery Rate, Lot-released (DIN 7704)

≥ 90%

##### Sterility (AC)

Zero growth

#### Order Numbers

25 mm diameter:

11407-025N, pack of 100

47 mm diameter:

11407-047N, pack of 100

11407-047R, pack of 1000

11407-047ACN, pack of 100

individual sterile packed

11407-047ACR, pack of 1000

individual sterile packed

50 mm diameter:

11407-050N, pack of 100

11407-050ACN, pack of 100

individual sterile packed

11407-050ACR, pack of 1000

individual sterile packed