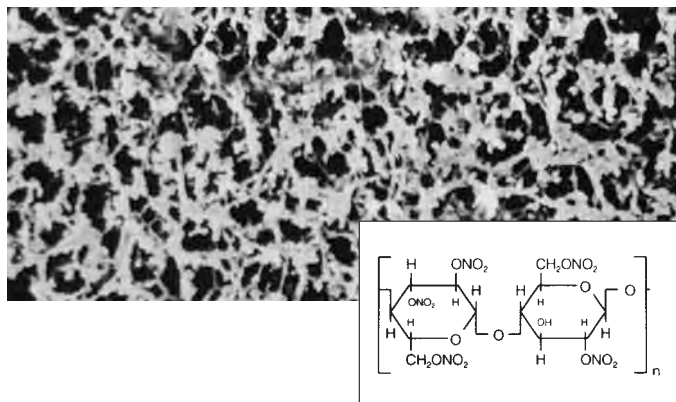


### 3.1 Cellulose Nitrate Membranes

Type 11405 | 13905 | 13005; Gridded, 0.65 µm



#### Description

Gridded cellulose nitrate membranes are the optimal, and most commonly used filters for microbiological testing of water, beverages, foods, pharmaceuticals, cosmetics and many other similar products.

#### Color

11405 White with black grid  
13905 White with green grid  
13005 Black with white grid (grey when dry)

#### Material

Cellulose nitrate (cellulose ester)

#### Reaction to Water

Hydrophilic

#### Pore Size (Nominal)

0.65 µm

#### Structure

Symmetric

#### Applications and Features

##### Typical Applications

Microbiological testing of water, pharmaceutical, foods, beverages and many other products where a higher flow rate is desired.

##### Special Features

- Excellent growth medium
- Higher flow rate
- Common for the detection of yeasts and molds

##### Technical Advantages

- Grid does not inhibit growth
- Absolute retention of yeasts and molds

#### Typical Performance

##### 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)

130 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 (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

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

≥ 90%

##### Sterility (AC)

Zero growth

#### Order Numbers

25 mm diameter:

11405-025N, pack of 100

47 mm diameter:

11405-047N, pack of 100

11405-047ACN, pack of 100

individual sterile packed

13905-047ACN, pack of 100

individual sterile packed

13005-47N, pack of 100

13005-07ACN, pack of 100

individual sterile packed

50 mm diameter:

11405-050N, pack of 100

11405-050ACN, pack of 100

individual sterile packed

13905-050ACN, pack of 100

individual sterile packed

13005-050N, pack of 100

13005-050ACN, pack of 100

individual sterile packed

13005-050ACR, pack of 1000

individual sterile packed