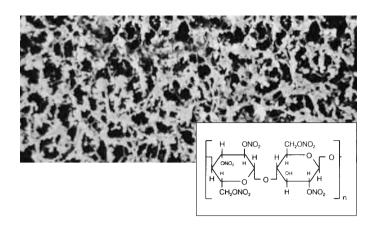
## 3.1 Cellulose Nitrate Membranes Type 11305 | 11304; White, 0.65 μm | 0.8 μm



#### Description

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

#### Color

White, no grid.

#### Material

Cellulose nitrate (cellulose ester)

#### **Reaction to Water**

Hydrophilic

## Pore Size (Nominal)

 $11305 = 0.65 \,\mu\text{m}$  $11304 = 0.8 \,\mu\text{m}$ 

## Structure

Symmetric

## **Applications and Features**

#### **Typical Applications**

Cell retention, sample pretreatment, particle retention, clarifying filtration etc.

## **Special Features**

- Higher flow rate
- High non-specific adsorption

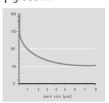
## **Technical Advantages**

- Good retention rate for larger particles due to the high non-specific adsoption
- High flow rate

## **Typical Performance**

#### Adsorption, Non-specific

The non-specific adsorption decreases with increasing pore size, see example for  $\gamma$ -globulin



γ-globulin, approx. 125 μg/cm<sup>2</sup>

#### **Bubble Point with Water (DIN 58355)**

11305 2.0 bar | ~ 29 psi 11304 1.4 bar | ~ 20.3 psi

#### **Burst Pressure**

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 Water per cm<sup>2</sup> (DIN 58355)

11305 130 ml/min at  $\Delta p = 1 \text{ bar } | \sim 15 \text{ psi}$ 

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

corresponding water flow rate: approx. 200 ml/min at  $\Delta p = 1$  bar  $|\sim 14.5$  psi

## **Sterilization Methods**

Autoclaving at 121°C, ETO sterilization,  $\gamma$ -irradiation (25 kGy)

# Thermal Resistance 130°C max.

## Thickness (DIN 53105)

Approx. 130 µm

### Sterility (AC) Zero growth

#### **Order Numbers**

13 mm diameter: 11304-013N, pack of 100

20 mm diameter: 11304-020N, pack of 100

#### 25 mm diameter:

11305-025N, pack of 100 11304-025N, pack of 100

## 37 mm diameter:

11308-037 N, pack of 100

#### 47 mm diameter:

11305-047N, pack of 100 11305-047ACN, pack of 100 11304-047N, pack of 100 11304-047ACN, pack of 100 individual sterile packed

#### 50 mm diameter:

11305-050N, pack of 100 11305-050ACN, pack of 100 individual sterile packed 11304-050N, pack of 100 11304-050ACN, pack of 100 individual sterile packed

90 mm diameter: 11304-090N, pack of 100

## 142 mm diameter:

11305-142G, pack of 25 11304-142G, pack of 25 11304-142N, pack of 100

#### 293 mm diameter:

11304-293G, pack of 25 11304-293N, pack of 100

<sup>\*</sup> ASTM D737 DIN 53'887 ISO 9'237