

InfinityLab Vacuum Filtration System for the Filtration of HPLC Eluents

Operating Instructions



Safety note

This unit can be used in combination with dangerous materials, operating procedures, and apparatuses. However, these Operating Instructions cannot indicate all safety problems that may arise. It is the responsibility of the user to ensure that all safety and health-related regulations are obeyed and to establish the necessary limitations before use.

Specifications

- Wetted parts: 100% Borosilicate glass (without membrane)
- Effective filtration area: 9.6 cm²
- Compatible membrane filter diameter: 47 mm
- Glass-fritted membrane base holder with integrated vacuum connector
- Graduated funnel
- Funnel capacity: 250 mL
- Flask ground joint: 40/38
- Flask capacity: 1,000 mL (2,000 mL optional)
- Anodized aluminum clamp

Preparing the filtration apparatus

Before the first operation, clean the filtration unit (see "Cleaning").

1. Place the lower section with the socket (3) on the cone of the Erlenmeyer flask (5).
2. Using tweezers, place a membrane filter on the filter support, and ensure that it fully covers the glass frit.
3. Fit on funnel (2)
4. Lock the filtration apparatus with a spring-action clamp (4).

Filtration

1. Using vacuum tubing, connect the assembled apparatus, with the filter in place, to a vacuum pump.
2. Always have a filter membrane in place (see "Compatible filter membranes").
3. Remove the lid from the funnel for filter purposes.
4. Switch on the pump, and pour the liquid to be filtered into the funnel (2). Do not allow the funnel to empty before adding more liquid. Do not exceed the maximum volume of liquid of the installed flask (5/6). To avoid damage to your vacuum pump, use a Woulfe bottle.

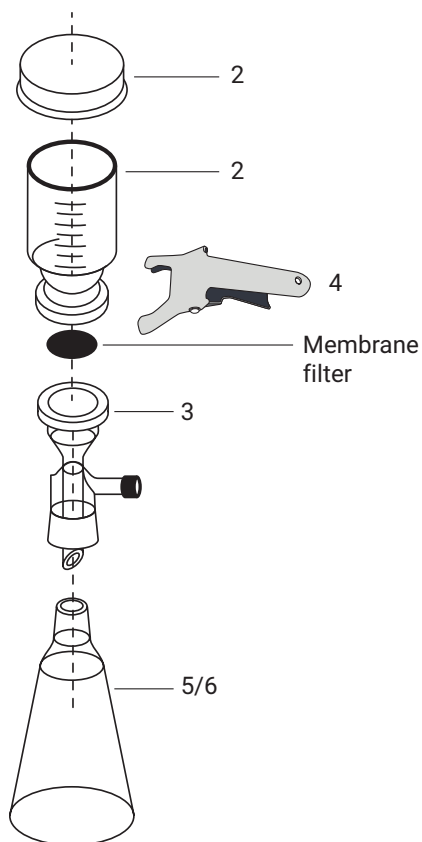
Cleaning

Carefully clean the equipment before using it the first time, and after every filtration. Salt crystallization in the glass frit pores can lead to carryover or reduced flow rates. Do not use dishwashers to clean the filtration assembly parts.

1. Before using the vacuum filtration apparatus (1) with the glass-fritted base the first time, draw hot distilled water through the frit under the highest possible vacuum to remove dirt particles and glass dust.
2. Dismantle the filtration apparatus into its separate parts.
3. Check the ground surfaces of the glass frit (3). Replace damaged parts.
4. Rinse each part in hot water.
5. Any residue left in the pores of the glass frit after filtration requires removal by chemical means. The solvent chosen depends on the type of deposit to be removed.

Parts list

Part Number	Designation	Ref. No.
5191-6776	InfinityLab Solvent Filtration Assembly	1
5191-6777	InfinityLab Solvent Filtration 250 mL Glass Funnel	2
5191-6778	InfinityLab Solvent Filtration Glass Filter Membrane Holder Base	3
5191-6779	InfinityLab Solvent Filtration Anodized Aluminum clamp	4
5191-6780	InfinityLab Solvent Filtration 1,000 mL Glass Flask	5
5191-6781	InfinityLab Solvent Filtration 2,000 mL Glass Flask (optional)	6



Compatible filter membranes

Part Number	Membrane Type
5191-4336	PTFE filter membrane, 47 mm diameter, 0.45 μm ; 100/pack
5191-4339	PTFE filter membrane, 47 mm diameter, 0.20 μm ; 100/pack
5191-4338	Nylon filter membrane, 47 mm diameter, 0.45 μm ; 100/pack
5191-4341	Nylon filter membrane, 47 mm diameter, 0.20 μm ; 100/pack
5191-4337	Regenerated Cellulose filter membrane, 47 mm diameter, 0.45 μm ; 100/pack
5191-4340	Regenerated Cellulose filter membrane, 47 mm diameter, 0.20 μm ; 100/pack

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This information is subject to change without notice.

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