

FILTROS DE JERINGA
MINISART[®]
PARA ANALISIS QUÍMICO



Minisart® Syringe Filter Selection Guide

Sample Composition

Aqueous

All Aqueous Solutions ■ Buffers, Protein Analysis	All Aqueous Solutions ■ Tissue Culture Media
SFCA Surfactant Free Cellulose Acetat	PES Polyethersulfone

Solvents

Hydrophilic ■ Aqueous Solvent Mixtures Solvents	Hydrophilic ■ Solvent Mixtures Solvents	Hydrophobic ■ Solvents Gases Acids Bases
RC Regenerated Cellulose	NY Polyamide, Nylon	PTFE Polytetrafluorethylene

Pore Sizes

Sterilization

0.1 µm	Small Bacteria Mycoplasma Colloids > 0.1
0.2 µm	UHPLC, etc. (Columns < 3µm Particles) Bacteria

Sample Preparation|Clarification|Particle Removal

0.45 µm	HPLC, etc. (Columns < 3 µm Particles) Particles
0.65 µm	Particles Yeast Cells
0.8 µm	Particles Yeast Cells
1.2 µm	Particles Yeast Cells Platelets
5 µm	Large Particles Rubber Grit Cells

Prefiltration

GF (Glass Fibre)	Glass Prefilter Glass + Membrane Highly Particle-laden Samples
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Applications

Type of Filtration	1 st Choice	Rec. Alternatives
HPLC ■ UHPLC ■ LCMS ■ IC ■ GC – Sample Preparation	RC	PTFE NY
Undiluted Organic Solvents	RC PTFE	NY
Protein Analysis ■ Samples with Biomolecules ■ Buffers	SFCA	RC PES
Tissue Culture Media	PES	SCFA RC
Highly Particle-laden Samples ■ Organic Solvents	GF NY	–
Highly Particle-laden Samples ■ Aqueous Solutions	GF SFCA	GF NY

- pH 1–14: PTFE|GF
- pH 3–14: RC|NY|PTFE|GF
- pH 3–12: RC|PES|NY|PTFE|GF
- pH 4–8: SFCA|RC|PES|NY|PTFE|GF*

*Compatibility tested with a contact time of 24 hours at 20 °C

Sample Volumes



4 mm Ø for up to 1 ml – Ø 0.1–1 ml



15 mm Ø for up to 15 ml – Ø 0.5–15 ml



25–28 mm for up to 100 ml – 5–100 ml

Sample Preparation for Analytics – HPLC | UHPLC | LCMS | IC | GC



Male Spike



Male Luer Slip



4 mm packages are color-coded

Reliable Removal of Particles and Microorganisms from Liquids to Protect your Columns and Instruments

Elimination of particles from your samples prior to HPLC or other chromatographic analysis is essential in order to maintain the integrity of your chromatography column and to maximize its operating life. Minisart® syringe filters consist of a PP housing and membrane components featuring maximum chemical compatibility and minimum extractables to ensure excellent results.

Minisart® Features

- 15 mm and 25 mm with pore size and type of membrane identified
- 4 mm with color-coded package
- Low adsorption of analytes
- Maximum chemical compatibility
- Minimum extractables or leachables
- Superior flow rate
- Low hold-up volumes
- 100% integrity tested
- Bidirectional use
- Certified quality

Key Specifications

Diameter [mm]	Pore Size [µm]	Membranes	Housing	Connector Outlet	Hold-up Volume [µl**]	Filter Area [cm²]
25	0.2 0.45	RC PTFE NY	PP*	Male Luer Slip	100–200	4.8
15	0.2 0.45	RC PTFE NY	PP*	Male Luer Slip Male Spike	30–100	1.7
4	0.2 0.45	RC PTFE	PP*	Male Luer Slip	5–10	0.07
GF Prefilter	1.2+0.2 0.45	GF+NY	PP*	Male Luer Slip	250–500	4.8

*PP = Polypropylene **Hold-up volume after air purge. Volumes can vary depending on membrane and liquid used.

Specifications for Minisart® RC, Minisart® SRP, Minisart® NY, 4mm, 15 mm and 25 mm Membrane Diameter

Application Limits	Max. recommended operating pressure 4.5 bar 450 kPa 65 psi
Housing burst pressure	6 bar 600 kPa 87 psi and higher
Max. temperature	121 °C, 30 min (autoclave)
Bubble point	Min value with water (Minisart® RC) ≥ 3.2 bar/≥ 47 psi (0.2 µm), ≥ 2.0 bar/≥ 29 psi (0.45 µm) Min value with isopropanol (Minisart® SRP) ≥ 1.4 bar/≥ 20 psi (0.2 µm), ≥ 0.9 bar/≥ 13 psi (0.45 µm) Min value with water (Minisart® NY) ≥ 3.0 bar/≥ 44 psi (0.2 µm), ≥ 2.0 bar/≥ 29 psi (0.45 µm)
Flow rate, 4 mm	Typical values for water at xp = 3 bar 0.5 ml/min (0.2 µm), 1.5 ml/min (0.45 µm), Minisart® RC Typical values for methanol at xp = 1 bar 1.5 ml/min (0.2 µm), 3.0 ml/min (0.45 µm), Minisart® RC; 4.5 ml/min (0.45 µm), Minisart® SRP Typical values for air at xp = 1 bar 60 ml/min (0.45 µm), Minisart® SRP
Flow rate, 15 mm	Typical values for water at xp = 1 bar 10 ml/min (0.2 µm), 30 ml/min (0.45 µm), Minisart® RC; 20 ml/min (0.2 µm), 40 ml/min (0.45 µm), Minisart® NY Typical values for methanol at xp = 1 bar 55 ml/min (0.2 µm), 105 ml/min (0.45 µm), Minisart® RC; 55 ml/min (0.2 µm), 150 ml/min (0.45 µm), Minisart® SRP Typical values for air at xp = 1 bar 0.5 l/min (0.2 µm), 1.1 l/min (0.45 µm), Minisart® SRP
Flow rate, 25 mm	Typical values for water at xp = 1 bar 60 ml/min (0.2 µm), 100 ml/min (0.45 µm), Minisart® RC; 75 ml/min (0.2 µm), 130 ml/min (0.45 µm), Minisart® NY Typical values for methanol at xp = 1 bar 160 ml/min (0.2 µm), 325 ml/min (0.45 µm), Minisart® RC; 160 ml/min (0.2 µm), 260 ml/min (0.45 µm), Minisart® SRP Typical values for air at xp = 1 bar 1.2 l/min (0.2 µm), 1.8 l/min (0.45 µm), Minisart® SRP
Water penetration point	Minisart® SRP (hydrophobic PTFE) 4.0 bar (0.2 µm) or 3.0 bar (0.45 µm)