

СИСТЕМА ФИЛЬТРАЦИИ SAMPLICITY G2



Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37

Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Саранск (8342)22-96-24
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97

Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

<https://millipore.nt-rt.ru> || <mailto:mer@nt-rt.ru>

Introduction

The Smplicity® G2 Filtration System is a vacuum-based system that simultaneously filters multiple samples directly into standard HPLC vials. It can filter up to eight samples, even those with high viscosity or particulates, in seconds. Samples can be filtered with either disposable Millex Smplicity® filters or conventional 33 mm Millex® filters. Millex Smplicity® filters come in strips of four for fast setup, but can be separated at the perforations to filter fewer samples. The disposable Millex® filters come with separate funnels that are inserted before use. In both cases, the funnel entrance to the filter allows quick and easy loading with a pipettor, providing a convenient, ergonomic alternative to syringe filters. Filtered samples are immediately ready for subsequent analyses.

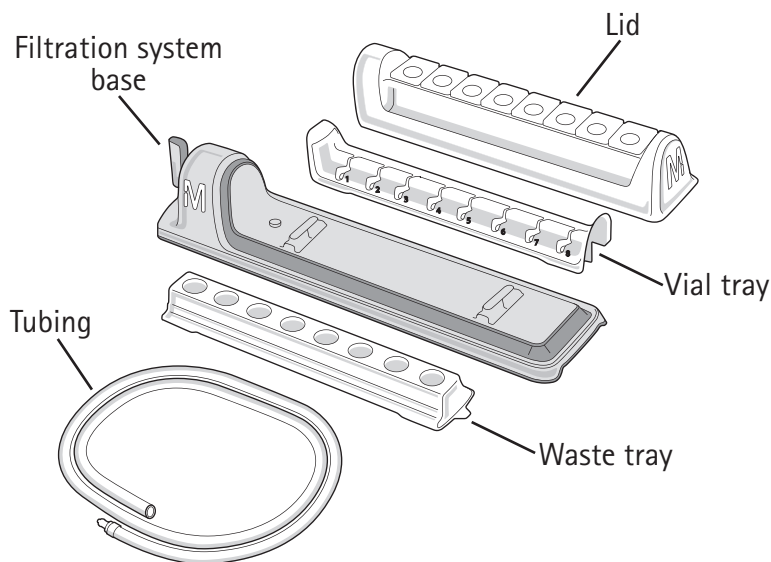
NOTE: All instances of Millex® filters cited in this User Guide refer to Millex® filters for the Smplicity® G2 system, which are sold with adapter funnels.

Applications include sample preparation for dissolution testing, high performance liquid chromatography (HPLC), ultra-high performance liquid chromatography (UHPLC or UPLC®), and liquid chromatography-mass spectrometry (LC-MS).

The Smplicity® G2 Filtration System and its associated filters are intended for use in a GLP (Good Laboratory Practice) environment.

Smplicity® G2 Filtration System Components

The Smplicity® G2 Filtration System includes the following components:



NOTE: In order to use the original Smplicity® Filtration System with Millex® filters, you must purchase the new Smplicity® G2 lid.

Safety Precautions

- Use a vacuum source appropriate for the samples being filtered.
- Protect the vacuum source from contamination with an in-line filter (e.g., Millex®-FA50 filter).

Chemical Compatibility

Millex Smplicity® and Millex® Filters Chemical Compatibility

Millex Smplicity® and Millex® filters are compatible with aqueous and mild organic solutions. They can be used to filter the agents listed in the following tables. This information was developed from technical publications, materials suppliers, and laboratory tests, and is believed to be accurate and reliable. However, because of variability in temperature, concentrations, exposure time, and other factors outside of our control that may affect the use of the filter, no warranty is given or is to be implied with respect to such information. Agents not listed below should be tested with the Millex Smplicity® or Millex® filter prior to use.

Millex Smplicity® Polytetrafluoroethylene (PTFE) Filter Compatibility

Acetic acid, glacial	Dimethyl sulfoxide	Isopropyl acetate	 Phenol (10%) Pyridine Silicone oils Sulfuric acid Tetrahydrofuran Toluene Trichloroethane Trichloroethylene Trifluoroacetic acid Xylene
Acetone	Dioxane	Isopropyl alcohol	
Acetonitrile	Ethers	Kerosene	
Amyl acetate	Ethyl acetate	Methyl alcohol	
Amyl alcohol	Ethyl alcohol	Methylene chloride	
Benzyl alcohol (1%)	Ethylene glycol	Methyl ethyl ketone	
Boric acid	Formaldehyde	Methyl isobutyl ketone	
Brine (sea water)	Gasoline	Nitric acid	
Butyl alcohol	Glycerine (Glycerol)	Nitrobenzene	
Cellosolve® (ethyl) solvent	Hexane	Paraldehyde	
Chloroform	Hydrochloric acid	Pentane	
Cyclohexanone	Hydrofluoric acid	Perchloroethylene	
Dimethyl acetamide	Hydrogen peroxide (30%)	Petroleum based oils	
Dimethyl formamide	Isobutyl alcohol	Petroleum ether	

NOTE: For low extractable HPLC applications, we recommend either discarding the first 1 mL or rinsing the filter with 1 mL of primary solvent before sample filtration.

Millex Smplicity® Polyvinylidene Fluoride (PVDF) Filter Compatibility

Acetic acid, glacial	Cellosolve® (ethyl) solvent	Glycerine (glycerol)	 Sulfuric acid (3 N) Toluene Trifluoroacetic acid Xylene
Acetonitrile	Chloroform	Hydrochloric acid	
Ammonium hydroxide	Cyclohexanone	Hydrofluoric acid	
Amyl alcohol	Ethyl alcohol	Hydrogen peroxide (10%)	
Benzene	Ethylene glycol	Kerosene	
Boric acid	Formaldehyde	Methyl alcohol	
Brine (sea water)	Formic acid	Petroleum based oils	
Carbon tetrachloride	Gasoline	Phenol (10%)	

Cleaning and Maintenance

The Smplicity® G2 Filtration System must be kept clean in order to function properly. To prevent buildup of contaminants, clean up spills and sample residue promptly. If liquid spills in the system, remove the vial tray, clean the system, then apply vacuum pressure for 30 seconds. Clean components as follows:

- Lid, doors, and vial tray: Hand wash with mild soap solution, followed by rinse in deionized water; or wipe down with deionized water, 10% bleach, 70% ethyl alcohol, or 100% methyl alcohol. Do not use abrasive cleaning agents. Wipe components dry with a soft, lint-free cloth.
- Base: Wipe down with mild soap solution, then wipe with deionized water; or wipe down with deionized water, 10% bleach, 70% ethyl alcohol, or 100% methyl alcohol. Wipe dry with a soft, lint-free cloth.

NOTE: Smplicity® G2 Filtration System components should not be cleaned in a dishwasher or autoclaved.

Specifications

Smplicity® G2 Filtration System

Performance

Vacuum pressure recommended 610–847 mbar (18–25 in. Hg) at 30 L/min

Dimensions

Length	44.5 cm (17.5 in.)
Width	10.2 cm (4.0 in.)
Height	9.1 cm (3.6 in.)
Weight (approximate)	1.3 kg (2.9 lb)
Tubing	6.4 mm ID × 0.9 m (1/4 in. ID × 36 in.)
Waste tray well capacity	5 mL

Materials of Construction

Base	Polypropylene, silicone, stainless steel
Waste tray	Recycled polyester (PET)
Vial tray	Polypropylene, thermoplastic elastomer (TPE)
Lid/doors/seals	Engineering copolymer, TPE
Filter sealing grommet	Thermoplastic vulcanizate (TPV)
Internal components	Polypropylene, Tygon® tubing, polyvinyl chloride (PVC), acetal, Buna-N
Vacuum tubing and connector	Tubing: silicone Connector: acetal, Buna-N, stainless steel

Specifications, continued

Millex Smplicity® Filter

Dimensions (strip of 4 filters)	
Length	14.5 cm (5.7 in.)
Width	4.3 cm (1.7 in.)
Height	3.0 cm (1.2 in.)
Weight	22.7 g (0.8 oz)
Sample volume	0.3–1.7 mL
Materials of Construction	
Housing	High density polyethylene (HDPE), TPE, high impact polystyrene/polyester (HIPS/PET)
Membrane	0.20 µm hydrophilic PTFE 0.45 µm hydrophilic PTFE 0.45 µm hydrophilic PVDF
HPLC Certification (PTFE filters only)	Millex Smplicity® PTFE filters are tested for UV-absorbing extractables. One-milliliter samples of acetonitrile (0.20 and 0.45 µm filters) and water (0.45 µm filter) are collected after discarding the first 1 mL of solvent. HPLC analysis shows no peaks greater in intensity than 0.004 AUFS (after column frontal volume) at either 214 or 254 nm.

Millex® Filters for the Smplicity® G2 Filtration System

Dimensions	Millex® filter	Funnel
Length	26 mm (1.02 in.)	23.4 mm (0.92 in.)
Diameter	33 mm (1.30 in.)	22.4 mm (0.88 in.) opening Luer-slip outlet
Filtration surface area	4.5 cm ² (0.7 in. ²)	N/A
Weight	3.7 g (0.13 oz)	0.5 g (0.02 oz)
Sample volume	0.4–1.7 mL	N/A
Materials of Construction		
Membrane		
GV, HV	Hydrophilic Durapore® PVDF	
GP, HP	Hydrophilic Millipore Express® PLUS PES	
GN, HN	Nylon	
Filter housing	Polypropylene	
Funnel	Polypropylene	
HPLC Certification (Nylon filters only)	Millex®-GN and HN filters are tested for UV-absorbing extractables. HPLC analysis of 1 mL samples of both acetonitrile and water collected after discarding the first 1 mL of solvent showed no peaks greater in intensity than 0.004 AUFS (after column frontal volume) at either 214 or 254 nm. Representative samples of all lots manufactured are tested.	

Conformance to Pressure Equipment Directive

The Smplicity® G2 Filtration System does not fall within the scope of Pressure Equipment Directive 2014/68/EU (PED), therefore, conformance to this directive is not applicable.

Ordering Information

This section lists catalogue numbers for the Smplicity® G2 Filtration System and related products. See the Technical Assistance section for contact information. You can also purchase these products online at www.millipore.com/products.

Product Description		Cat. No.	Qty/Pk
Smplicity® G2 Filtration System			
(includes base, vial tray, lid, waste tray, tubing, and quick-start guide)	Blue	SAMP2SYSB	1
	Green	SAMP2SYSG	1
Smplicity® Filtration System Vial Trays (one blue, one green)		SAMVIALTR	2
Smplicity® Filtration System Waste Trays		SAMWASTTR	5
Smplicity® Filtration System Tube Set Assembly		SAMTUBING	1
Smplicity® G2 Filtration System Lid		SAMP2LID	1
Millex Smplicity® Filters			
0.20 µm hydrophilic PTFE filter		SAMPLG001	96
		SAMPLG004	384 (4 × 96/pk)
0.45 µm hydrophilic PTFE filter		SAMPLCR01	96
		SAMPLCR04	384 (4 × 96/pk)
0.45 µm hydrophilic PVDF filter		SAMPHV001	96
		SAMPHV004	384 (4 × 96/pk)

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37

Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Саранск (8342)22-96-24
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97

Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

<https://millipore.nt-rt.ru> || <mailto:mer@nt-rt.ru>