

**Millipore®**

Filtration, Separation  
& Preparation

# Samplicity® G2 Filtration System for HPLC Samples

The better way to use Millex® filters



The life science business of Merck operates as  
MilliporeSigma in the U.S. and Canada.

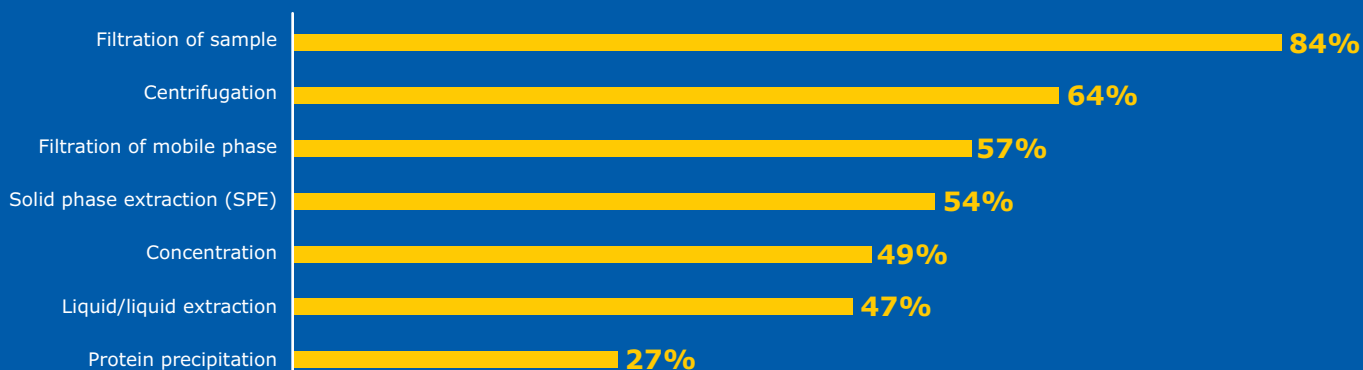
**MERCK**



# HPLC sample filtration is here to stay.

According to a 2015 survey by LC/GC magazine, sample filtration was performed by a larger percentage of separation scientists than extraction, centrifugation, precipitation, or concentration\*.

With downstream detection methods becoming more and more sensitive to particulate contamination, filtration is as crucial as ever.



\*Based on survey of 413 respondents. Each respondent was asked to choose multiple methods that they were currently using.

## Love Millex® filters, but have tired thumbs?

For chromatographers who filter dozens of samples a day through Millex® syringe filters, especially for hard-to-filter, viscous or particulate-laden samples, traditional filtration can lead to manual fatigue, and even repetitive stress injury. Nevertheless, they stick with Millex® filters, which are specified in numerous analytical methods and standard operating procedures.

### Introducing the Samplicity® G2 Filtration System for Millex® Filters.

By adding a simple adapter funnel to standard Millex® 33 mm filters, we've enabled easy, vacuum-driven filtration of up to 8 samples at once, directly into HPLC vials, in seconds.

Look up the Millex® 33 mm filters you use for manual syringe filtration in the table below to find the corresponding Samplicity® G2 filter catalog numbers.



Millex® Filter Description	Catalog No.* (Manual)	Catalog No. (Samplicity® G2 system)
Millex® Filters for the Samplicity® G2 System, 0.22 µm Durapore® PVDF	SLGV033N-	SAMP2GVNB
Millex® Filters for the Samplicity® G2 System, 0.45 µm Durapore® PVDF	SLHV033N-	SAMP2HVNB
Millex® Filters for the Samplicity® G2 System, 0.22 µm Millipore Express® PLUS PES	SLGP033N-	SAMP2GPNB
Millex® Filters for the Samplicity® G2 System, 0.45 µm Millipore Express® PLUS PES	SLHP033N-	SAMP2HPNB
Millex® Filters for the Samplicity® G2 System, 0.20 µm Nylon	SLGN033N-	SAMP2GNNB
Millex® Filters for the Samplicity® G2 System, 0.45 µm Nylon	SLHN033N-	SAMP2HNNB

\*The last character of the Millex® part number represented by the "-" may be an S, K, or B.

# 80%

of chromatographers report using Merck filters for sample filtration

## Enjoy the Quality of Millex® Filters.

You trust Millex® filters for HPLC sample prep because of our highest quality design, manufacturing, materials and QC standards.

### Millex® filters are known for their:

- Minimal hold-up volume
- Filter and seal integrity
- Low extractables, low binding

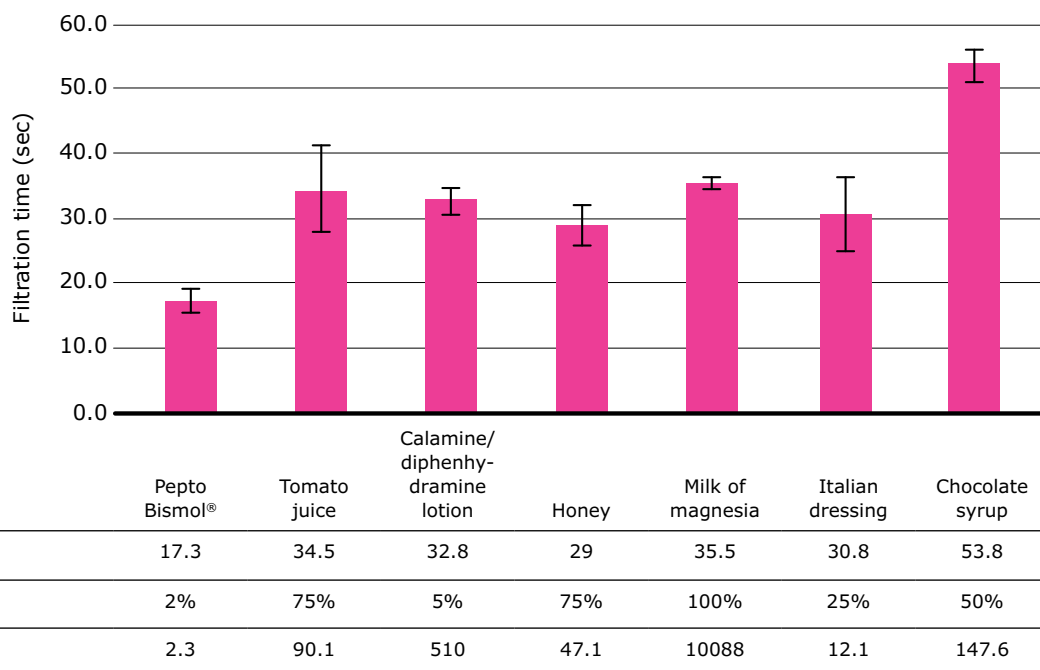
Millex® filters are available in a variety of membranes and polypropylene housings to ensure chemical compatibility with a range of samples and solvents.

The adapter funnels provided for the Smplicity® G2 system are made of the same polypropylene as our Millex® filter housings. Together, the filter plus adapter are HPLC-certified to be low in extractable impurities. That means you'll continue to enjoy clear chromatography results, without the pain of syringe filtration.

## Experience the efficient way to use Millex® filters: vacuum filtration.

Any process that uses Millex® 33 mm filters can now be performed using the vacuum-driven, time-saving, Smplicity® G2 filtration system – even for small-volume (as little as 300 µL) or hard-to-filter samples.

If manual filtration is used, hard-to-filter samples can require excessive manual force, greater time per sample, and can yield lower recovery – all of which may reduce laboratory efficiency. In contrast, the Smplicity® G2 filtration system filters even highly viscous samples in seconds, with minimal manual effort.



**Hard to filter? No More!** Efficient filtration of viscous samples using the Smplicity® filtration system with 0.45 µm PVDF Millex Smplicity® Filters. Filtration times for 1 mL of indicated samples are shown. Results represent the average of four filtrations, and error bars represent standard deviation.



## Save your thumbs.

According to a Baseline Risk Identification of Ergonomic Factors (BRIEF™) survey, the Smplicity® G2 system reduced the ergonomic impact of filtration compared to manual syringe filtration, as shown in the chart below.

## Smplicity® G2 System has lower ergonomic impact than manual syringe filtration

Sample Type	Job Hazard Score		
	Low (0-9)	Medium (10-29)	High (30-49)
Syringe Filtration of Non-viscous Sample (water)		12.8	
Syringe Filtration of Viscous Sample (16% ketchup)		16.0	
Smplicity® G2 System Filtration of Viscous Sample (16% ketchup)	8.0		

\*For reference, a task involving manipulating a heavy (13 kg) tool was found to have a medium/high job hazard score of 27. Note that the job hazard score for Smplicity® G2 remains at 8 regardless of the viscosity of the sample.



# Ultra-convenience

In addition to our Millex® 33 mm syringe filters, Millex Smplicity® filters for the Smplicity® G2 system take convenience in sample filtration one step further. These all-in-one filters feature:

- Integrated funnels for easiest sample loading
- Filters in perforated strips of 4 for fastest setup
- Quality membrane options, including PVDF (0.45 µm), hydrophilic PTFE (0.45 µm) and hydrophilic PTFE (0.2 µm)



## See it in action: Smplicity® G2 Videos

Watch a quick video how-to, plus a side-by-side comparison with syringe filtration.

Just visit:  
[www.merckmillipore.com/smplicity](http://www.merckmillipore.com/smplicity)

#### Ordering information for the Smplicity® G2 System

Millex® Filter Description	Quantity	Catalog No. (Smplicity® G2 system)
Millex® Filters for the Smplicity® G2 System, 0.22 µm Durapore® PVDF	250	SAMP2GVNB
Millex® Filters for the Smplicity® G2 System, 0.45 µm Durapore® PVDF	250	SAMP2HVNB
Millex® Filters for the Smplicity® G2 System, 0.22 µm Millipore Express® PLUS PES	250	SAMP2GPNB
Millex® Filters for the Smplicity® G2 System, 0.45 µm Millipore Express® PLUS PES	250	SAMP2HPNB
Millex® Filters for the Smplicity® G2 System, 0.20 µm Nylon	250	SAMP2GNNB
Millex® Filters for the Smplicity® G2 System, 0.45 µm Nylon	250	SAMP2HNNB
Smplicity® G2 Filtration System, Bold Blue	1	SAMP2SYSB
Smplicity® G2 Filtration System, Glossy Green	1	SAMP2SYSG
Millex Smplicity® Filters, 0.45 µm hydrophilic PTFE	96	SAMPLCR01
Millex Smplicity® Filters, 0.45 µm hydrophilic PTFE	384	SAMPLCR04
Millex Smplicity® Filters, 0.20 µm hydrophilic PTFE	96	SAMPLG001
Millex Smplicity® Filters, 0.20 µm hydrophilic PTFE	384	SAMPLG004
Millex Smplicity® Filters, 0.45 µm hydrophilic PVDF	96	SAMPHV001
Millex Smplicity® Filters, 0.45 µm hydrophilic PVDF	384	SAMPHV004
Smplicity® G2 Lid	1 pk	SAMP2LID
Chemical Duty Pump, 115V/60Hz	1	WP6111560
Chemical Duty Pump, 220V/50Hz	1	WP6122050
Chemical Duty Pump, 100V/50-60Hz	1	WP6110060

\*Note: Millex® filters are available in packs of 1000. Please visit: [www.merckmillipore.com](http://www.merckmillipore.com)

**Upgrade your current Smplicity® filtration system to the Smplicity® G2 model!**

**Get all the support you need for the HPLC workflow.**

- Sample preparation
- Columns
- Mobile phases
- Technical information

Visit: [www.merckmillipore.com/hplc-workflow](http://www.merckmillipore.com/hplc-workflow)



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Switzerland: 0848 645 645

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