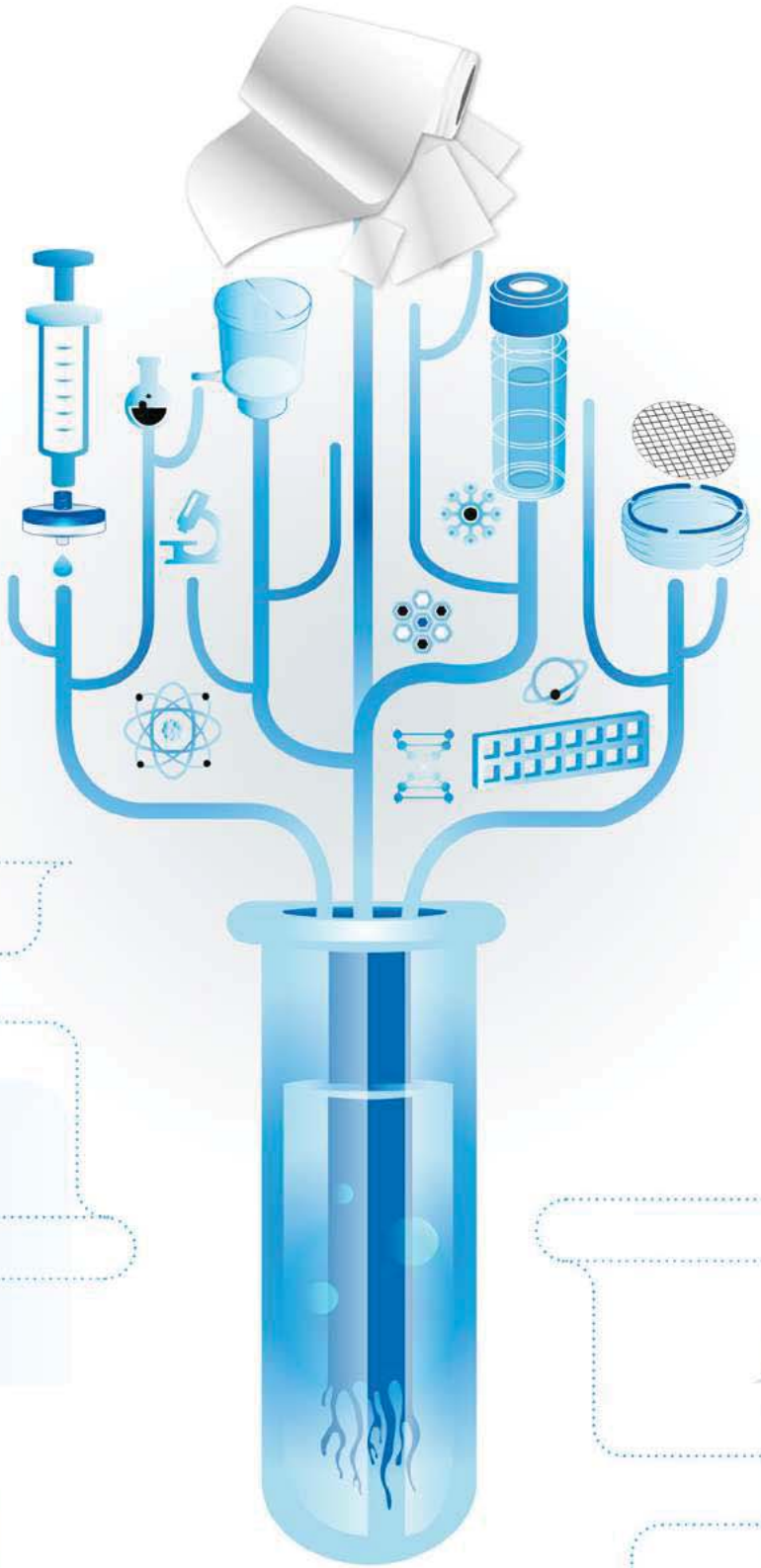
FILTER TECHNOLOGY

LIFE SCIENCES
PRODUCT COLLECTION

GVS

FILTER TECHNOLOGY

TRANSFER MEMBRANES



Nitrocellulose (NC)

NITRO *Pure*
Unsupported Nitrocellulose

GVS Nitrocellulose Pure Transfer Membrane is the membrane of choice for all protein or immunoblotting applications. The high sensitivity of GVS Nitrocellulose Transfer Membrane ensures excellent results in all transfers, especially in protein blotting.

Features & Benefits

- For procedures that require optimum resolution
- Membrane of choice for protein or immunoblotting applications
- Low background, easily blocked
- BSA binding capacity up to 100 µg/cm^2
- Wets out naturally
- Compatible with all detection systems

Typical Applications

- Western Blotting
- Protein & immunoblotting
- Northern Blotting
- Southern Blotting
- Dot/slot blotting
- Radiographic, chromogenic and chemiluminescent detection systems

Product Characteristics

Pore Size (µm)	Flow Time (s)	Volume/Vacuum (mL/in Hg)	Flow Rate (mL/min/cm^2 @ 10 psi)	Bubble Point (psi)	Thickness (µm)
0.22	80-160	250/20	9.94-19.88	60-80	110-190
0.45	60-130	250/20	12.24-26.51	45-65	110-190

Ordering information

Pore sizes	Dimensions (mm) Packaging	70x84 mm 10/pk	100x100 mm 10/pk	150x150 mm 5/pk	200x200 mm 25/pk	200x3000 mm 1/pk	300x3000 mm 1/pk
	0.22 µm	1213991	1213999	1215463	1215392	1215469	1215458
	0.45 µm	1213888	1213314	1215476	1221976	1215483	1215471

Supported Nitrocellulose

NITRO Plus
Supported
Nitrocellulose

GVS Supported NitrocelluloseTransfer Membrane combines the binding characteristics of nitrocellulose membrane with the strength of nylon membrane. It can be easily used in any protocol utilizing unsupported nitrocellulose transfer membrane.

Features & Benefits

- Supported for procedures requiring rigorous handling
- Strong - will not curl, bend or crack after baking
- High sensitivities, low backgrounds
- Multiple reprobings
- BSA binding capacity up to 100 µg/cm^2
- Triton Free

Typical Applications

- Northern Blotting
- Southern Blotting
- Multiple re-hybridizations
- Colony/plaque lifts
- Dot/slot blotting
- Radiographic detection systems
- Chemiluminescent detection systems
- Biotinylated detection systems

Product Characteristics

Pore Size (µm)	Flow Time (s)	Volume/Vacuum (mL/in Hg)	Flow Rate (mL/min/cm^2 @ 10psi)	Bubble Point (psi)	Thickness (µm)
0.22	70-150	250/20	10.60-22.72	50-75	100-140
0.45	50-130	250/20	12.24-31.81	30-55	100-130

Ordering information

Pore sizes	Dimensions (mm) Packaging	70x84 mm 10/pk	100x100 mm 10/pk	150x150 mm 5/pk	200x200 mm 5 /pk	200x3000 mm 1/pk	300x3000 mm 1/pk
	0.22 µm		1214560	1212669	1212689	1212690	1212632
	0.45 µm	1214978	1213943	1212596	1212597	1212602	1212590

Polyvinylidene Fluoride (PVDF)

PVDF *Pure*
Unsupported PVDF

GVS PVDF is a naturally hydrophobic, unsupported transfer membrane. It has a high binding capacity, which prevents protein from passing through the membrane, and a low background that provides for an excellent signal-noise ratio. It also has exceptional tensile strength, preventing it from cracking, tearing, breaking or curling. This membrane also has broad chemical compatibility, which is important when used with common stains such as Amido Black, Colloidal Gold, Coomassie Blue, India Ink and Ponceau-S. GVS PVDF will not degrade, distort or shrink when a high concentration of methanol is used for destaining.
Its exceptional strength, high binding capacity and chemical compatibility make GVS PVDF ideal for use in Western blotting, immunoblotting, and solid phase assays and plaque lifts.

Features & Benefits

- Superior strength: Can withstand aggressive handling or be used with automated equipment without breaking or tearing
- Low extractables: Ensures tests will be clean with consistent results
- Exceptional sensitivity: Detects low-level components
- Hydrophobic: For high protein binding
- Lot-to-lot consistency: Quality checks ensure consistent binding for dependable results every time
- BSA protein binding capacity : 125 µg/cm^2
- High range of chemical: Resistant to most commonly used chemicals compatible with chemically aggressive solvents

Typical Applications

- Western blotting
- Immunoblotting
- Solid phase assays
- Amino acid or protein analyses

Product Characteristics

Pore Size (µm)	Flow Time (s)	Volume/Vacuum (mL/in Hg)	Flow Rate (mL/min/cm^2 @ 10 psi)	Bubble Point (psi)	Thickness (µm)
0.22	100-500	250/20	3.18-15.91	40-60	140-250
0.45	35-200	250/20	7.95-45.45	25-40	140-250

Ordering information

Pore sizes	Dimensions (mm) Packaging	70x84 mm 10/pk	100x100 mm 10/pk	150x150 mm 5/pk	200x200 mm 5/pk	200x3000 mm 1/pk	300x3000 mm 1/pk
	0.22 µm	1214588		1215037	1215032	1214726	1214429
	0.45 µm	1213992	1212644	1212636	1212637	1212783	1212639

Supported Polyvinylidene Fluoride (PVDF)

PVDF*Plus*
PVDF

GVS Filter Technology PVDF is a naturally hydrophobic membrane. GVS offers the widest range of this membrane: pure transfer PVDF membrane, supported transfer PVDF membrane. Polyvinylidene Difluoride membrane has a high binding capacity and low backgrounds and is ideal for use in protein binding applications such as Western blots, solid phase assays and immunoblotting procedures. PVDF ensures reproducible results with maximum sensitivity. Proteins can be electroblotted from a variety of gel matrices. In addition, PVDF membrane will not degrade, distort or shrink when using a high concentration of methanol for destaining. The exceptional tensile strength allows for easy removal of target bands without concern for the membrane tearing, fracturing or curling.

GVS Filter Technology PVDF Transfer Membrane is available in roll widths from 0.3 inch (8 mm) to 17.7 inch (450 mm), as well as in sheets and cut disks that can be customized to meet your application and size requirements. If different width is required we can slit following your needs.

Features & Benefits

- Broad chemical compatibility allows for the use of all commonly used stains
- Low backgrounds ensure the highest sensitivities across a broad range of molecular weights

Typical Applications

- Western Blotting
- Binding Assay
- Dot/Slot Blotting
- Immunoblotting
- Solid phase assays
- Amino acid or protein analyses

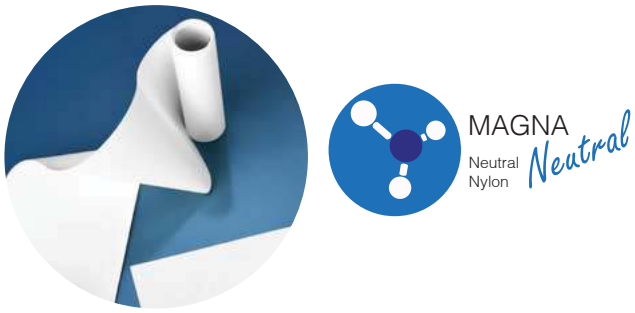
Product Characteristics

Pore Size (µm)	Flow Rate (mL / min / cm² @10psi)	Bubble Point		Thickness (µm)
		psi	bar	
0.22	> 4	> 28	> 1.9	150-200
0.45	> 7	> 23	> 1.5	150-200

Ordering information

Pore sizes	Dimensions (mm) Packaging	70x84 mm 10/pk	100x100 mm 10/pk	150x150 mm 5/pk	200x200 mm 5/pk	200x3000 mm 1/pk	300x3000 mm 1/pk
	0.22 µm	1214571	1214573	1214575	1214580	1214495	1214497
	0.45 µm	1214572	1214574	1214576	1214581	1214496	1214498

Neutral Nylon 66 Membrane



GVS Neutral Nylon Transfer Membrane is a pure polymer impregnated in by an inert polyester web. It is naturally hydrophilic and optimized for protein binding and for high, reproducible binding of nucleic acids.

Reliable Quality, Increased Efficiencies

This controlled microporous Nylon 66 membrane is cast on an inert, internal support web that gives it added dimensional strength and stability to prevent cracking, tearing, curling and breaking. This added strength and durability is essential in protocols that require aggressive handling, such as colony lifts and plaque lifts.

In addition to the dimensional strength and durability of GVS Neutral Nylon Transfer Membrane, its retention of macromolecules can also be enhanced using UV cross-linking. This process can be used to maximize the signal retention of nucleic acids and preserve the integrity of DNA or RNA transfers. The purity and consistency of GVS Neutral Nylon Transfer Membrane, coupled with its added durability and sensitivity, make it an ideal membrane for use in medical research, scientific studies or test confirmations where precise biological pattern replications, such as DNA and RNA transfers, are integral to the success of the procedure.

Features & Benefits

- Supported: has added strength and durability preventing distortion or contamination in multiple reprobings
- High binding capacity: with a nucleic acid binding capacity of approximately 350 µg/cm^2, Magna Nylon - Transfer Membrane can bind a wide range of fragment sizes, increasing the efficiency of transfers
- Hydrophilic: eliminates the need for wetting agents that can potentially interfere with biological processes
- Lot-to-lot consistency: quality checks ensure lot-to-lot consistency, both down and across the polyester web, for depenable results every time
- Maximum Operating Temperature 356°F (180°C)
- Autoclavable

Typical Applications

- Southern transfers
- Northern transfers
- Protein binding
- Microarrays
- Macroarrays
- Dot/Slot blotting
- Radiolabeled detection systems
- Non-radiolabeled detection systems
- Colony lifts
- Plaque lifts
- Library screening

Product Characteristics

Pore Size (µm)	Flow Time (s)	Volume/Vacuum (mL/in Hg)	Flow Rate (mL/min/cm^2 @ 10 psi)	Bubble Point (psi)	Thickness (µm)
0.2	113-277	250/20	5.74-14.08	40-68	140-190
0.4	65-205	250/20	7.76-24.47	32-57	140-190

Disks and Sheets
Ordering information

Pore sizes	Dimensions Packaging	82 mm 50/pk	85 mm 50/pk	132 mm* 50/pk	137 mm 50/pk	150x150 mm 5/pk	200x200 mm 5/pk
	0.22 µm		1213410				1213419
	0.45 µm	1213370 1214428*	1213372	1213373	1213375	1213379	1213380

*100/pk

Pore sizes	Dimensions Packaging	200x3000 mm 1/pk	300x3000 mm 1/pk
	0.22 µm		1213405
	0.45 µm	1213403	1213364

Reprobing Charged Nylon 66 (NY+)

MAGNA*Probe*
Reprobing Charged Nylon

Features & Benefits

- Supported charged nylon 66 membrane
- Specifically designed for multiple reprobings
- Used for both radiolabelled & non-radiolabelled detection systems
- Can be used for alkaline blotting
- Nucleic acid binding is 450 µg/cm²
- Maximum Operating Temperature 356°F (180°C)
- Autoclavable

GVS Nylon Reprobing Charged transfer membrane is a positively charged modified nylon 66 membrane, specifically designed to allow for numerous reprobings.
The high binding capacity of 450 mg/cm² makes GVS Nylon ideal for all Southern and Northern applications, including alkaline blotting. GVS Nylon is ideally suited for all probes both radioactive and non-radioactive, including chemiluminescent and biotinylated detection systems.
GVS Nylon 66 reprobing Charged transfer membrane offers significantly increased binding, maximum “lot-to-lot” consistency, and excellent signal retention. The inherent charge on this nylon membrane along with its hydrophilic nature makes consistent repeatable results a reality for researchers.
After 12 rounds of reprobing, GVS Nylon has a lower background and higher signal.

Typical Applications

- Radiolabelled & non-radiolabelled detection systems
- Norther Blotting
- Southern Blotting
- Multiple Reprobings
- Alkaline Blotting
- UV Crosslinking

Product Characteristics

Pore Size (µm)	Flow Time (s)	Volume/Vacuum (mL/in Hg)	Flow Rate (mL/min/cm² @ 10 psi)	Bubble Point (psi)	Thickness (µm)
0.45	20-75	250/20	21.21-79.53	14-20	120-190

Ordering information

	Dimensions Packaging	82 mm 50/pk	82 mm 100/pk	200x200 mm 25/pk	220x220 mm 5/pk	300x300 mm 5/pk
Pore size	0.45 µm	1226559	1226561	1226573	1226568	1226569

	Dimensions Packaging	300x300 mm 25/pk	150x3000 mm 1/pk	200x3000 mm 1/pk	300x3000 mm 1/pk
Pore size	0.45 µm	1226575	1226558	1226557	1226556