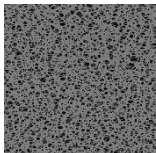
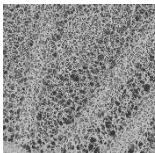
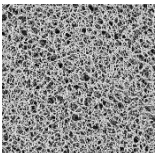
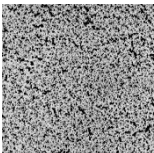
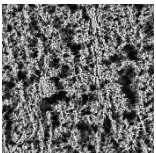


	PES	MCE	Nylon	PVDF	PTFE	
SEM						
Thickness/ μm	100-130	80-120	80-140	85-140	150-310	
Wettability	Hydrophilic	Hydrophilic	Hydrophilic	Hydrophobic	Hydrophobic/ hydrophilic	
pH	1-14	3.5-8	6-13	2-10	1-14	
Flow Time (s) (s) s/50ml/13.85cm ² @-0.093MPa	0.22	10.51	25	55	43	34.94
	0.45	4.5	8	15	22	7.01
Pore Size/ μm	0.1, 0.2, 0.22, 0.45, 0.65, 0.8, 1.0, 1.2, 2.0, 3.0, 5.0	0.1, 0.22, 0.45, 0.65, 0.8, 1.0, 1.2, 3.0, 5.0	0.1, 0.22, 0.45, 0.65, 0.8, 1.0, 1.2, 2.0, 3.0, 5.0, 10.0	0.1, 0.22, 0.45, 0.65, 0.8, 1.0, 3.0, 5.0	Hydrophobic 0.1, 0.22, 0.45, 1.0, 3.0, 5.0, 10.0 Hydrophilic 0.1, 0.22, 0.45, 1.0, 3.0, 5.0	
Characteristic	Broad chemical compatibility; low protein adsorption; low extractables	Low protein adsorption; ideal for biological products	Good mechanical strength; resistant to most organic solvents; ideal for alkaline	Naturally hydrophobic; good heat and chemical resistance	Naturally hydrophobic; broad chemical compatibility; superior heat resistance	
Application	Many of ready-to-use sterile filtration devices for buffers, tissue culture media, additives, etc.	Filtration of protein solutions, microbiological analysis, particle removal and clarification	Transfer membrane, clarification of aqueous solutions, particle removal and analysis, collection of particles and analysis	Transfer membrane, filtration of gas, filtration of corrosive solutions	Many of ready-to-use sterile filtration devices for aqueous solutions, organic solutions, filtration of gas filtration of corrosive solutions.	
Color			White			
Surface			Plain			

Chemical Compatibility Guide

<i>Classification</i>	<i>Name</i>	PES	MCE	Nylon	PVDF	PTFE	PP
Acids	Acetic Acid	NR	NR	NR	R	R	R
	Hydrochloric Acid (conc.)	R	NR	NR	R	R	R
	Hydrochloric Acid (6N)	R	NR	NR	R	R	R
	Nitric Acid (conc.)	-	NR	NR	R	R	R
	Nitric Acid (6N)	-	NR	NR	R	R	R
	Phosphoric Acid (conc.)	-	-	NR	R	R	R
	Sulfuric Acid (conc.)	NR	NR	NR	R	R	R
	Hydrofluoric Acid (6N)	-	NR	NR	R	R	NR
Bases	Ammonium Hydroxide (1N)	R	NR	R	LR	R	R
	Ammonium Hydroxide (3N)	R	NR	R	NR	R	R
	Potassium Hydroxide (3N)	R	NR	R	LR	R	R
	Sodium Hydroxide (3N)	R	NR	R	LR	R	R
	Sodium Hydroxide (6N)	R	NR	R	NR	R	R
Alcohols	Amyl Alcohol	R	NR	R	R	R	R
	Benzyl Alcohol (100%)	R	NR	R	R	R	R
	Butanol	R	-	R	R	R	R
	Isopropanol	R	-	R	R	R	R
	Methanol	R	-	LR	R	R	R
Ketones	Acetone	NR	NR	R	LR	R	R
	Cyclohexanone	NR	NR	-	LR	R	R
	Methyl Ethyl Ketone	-	NR	LR	LR	R	R
	Methyl Isobutyl Ketone	NR	NR	LR	LR	R	R
Oils	Cottonseed	-	-	R	R	R	R
	Lubricant	NR	-	R	R	R	R
	Peanut	-	-	R	R	R	R
	Sesame	R	-	R	R	R	R
Aromatic Hydrocarbons	Benzene	LR	R	LR	LR	R	NR
	Toluene	NR	R	NR	LR	R	NR
	Xylene	NR	R	LR	LR	R	NR
Halogenated Hydrocarbons	Carbon Tetrachloride	LR	R	LR	LR	R	LR
	Chloroform	NR	R	LR	LR	R	LR
	Ethylene Dichloride	NR	-	LR	LR	R	LR
	Freon TF	R	R	R	R	R	LR
	Freon TMC	NR	-	LR	LR	R	LR
	Methylene Dichloride	NR	-	NR	LR	R	LR
	Perchloroethylene	LR	-	-	LR	R	LR
	Trichloroethylene	LR	NR	LR	NR	R	LR
Glycols	Ethylene Glycol	LR	NR	R	R	R	R
	Glycerol	LR	R	R	R	R	R
	Propylene Glycol	LR	-	R	R	R	R
Ethers	Ethyl Ether	R	-	NR	R	R	LR
	Isopropyl Ether	-	-	-	R	R	R
	Dioxane	-	NR	R	R	R	R
	Tetrahydrofuran	NR	NR	NR	LR	R	LR

Classification	Name	PES	MCE	Nylon	PVDF	PTFE	PP
Esters	Amyl Acetate	-	NR	LR	R	R	R
	Butyl Acetate	-	NR	LR	R	R	LR
	Cellosolve Acetate	R	-	-	R	R	R
	Ethyl Acetate	LR	NR	LR	R	R	LR
	Methyl Acetate	NR	NR	LR	R	R	R
	Isopropyl Acetate	R	NR	-	R	R	R
Miscellaneous	Aniline	NR	-	LR	R	R	LR
	Dimethyl Formamide	NR	-	R	NR	R	R
	Formaldehyde (37%)	R	-	R	R	R	R
	Gasoline	R	R	LR	LR	LR	LR
	Hexane (dry)	LR	R	-	LR	LR	LR
	Kerosene	R	R	-	R	R	R
	Phenol	NR	NR	R	R	R	R
	Pyridine	NR	NR	LR	R	R	LR
	Turpentine	R	-	-	R	R	LR
	Water	R	R	R	R	R	R
	Acetonitrile	R	NR	LR	R	R	LR
	Nickel Sulfate Solution	-	-	R	R	R	R

Notes: This table is intended to serve as a guide only. Accuracy cannot be guaranteed. Users are responsible for verifying chemical compatibility under their own conditions of use. Chemical compatibility is affected by many variables including temperature, pressure, concentration, and chemical purity.

R: Resistance;

LR: Limited resistance;

NR: No resistance;

"-": No data available.

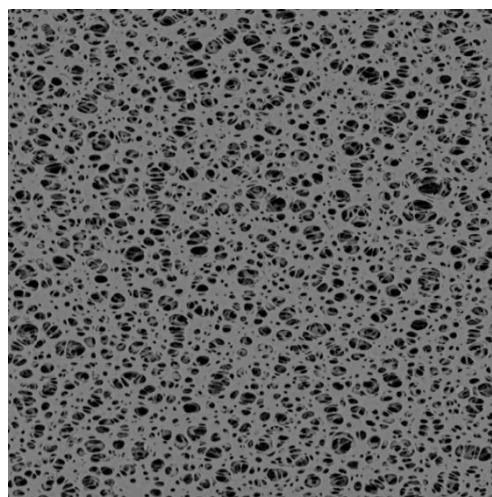
PES Membrane

Entegris provide naturally hydrophilic PES filtration membrane with low extractables.

PES Filtration Membrane is made from a partially sulfonated polyethersulfone polymer.

Their highly asymmetric pore structure offers a perfect balance between highly selective filtration characteristics and high fluxes with minimized flux barriers.

The product uniformity results in consistent filtration performance. Its high mechanical strength supports most kinds of assembling technologies.



APPLICATIONS

- Sterilization filtration
- Bioburden reduction
- Particle removal

FEATURES & BENIFITS

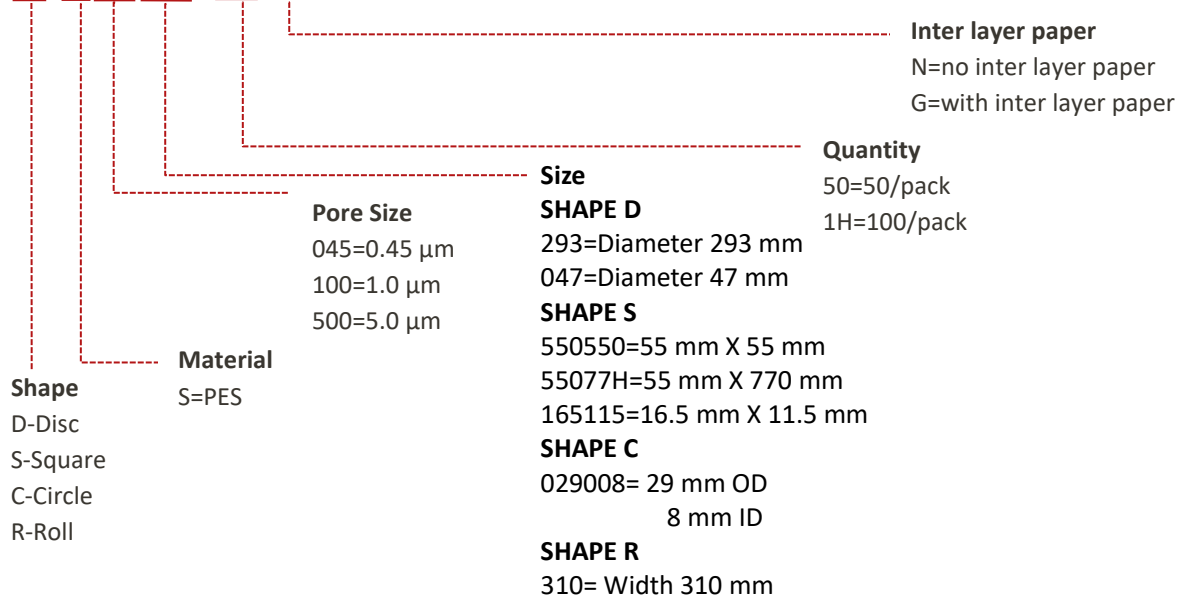
Hydrophilic	Eliminates the need for wetting agents that can potentially interfere with biological processes
Super strength	Eases handling when used with automated equipment
Lot-to-lot consistency	Quality checks ensure lot-to-lot consistency, both down and across the polyester web, for dependable results every time
Low extractables	Ensures tests will be clean and pure leading to more consistent results

SPECIFICATIONS

Material	Pore Size (μm)	Bubble Point(\geq)	Flow Rate(\geq) mL/min/cm ² @0.093Mpa)	Thickness(μm)
PES	0.1	0.20MPa(25°C,99.7% Alcohol)	7.2	100-130
PES	0.2	0.35MPa(25°C,Pure water)	20.6	100-130
PES	0.22	0.35MPa(25°C,Pure water)	20.6	100-130
PES	0.45	0.23MPa(25°C,Pure water)	48.1	100-130
PES	0.65	0.18MPa(25°C,Pure water)	77.4	100-130
PES	0.8	0.12MPa(25°C,Pure water)	108.3	100-130
PES	1.0	0.08MPa(25°C,Pure water)	144.4	100-130
PES	1.2	0.06MPa(25°C,Pure water)	144.4	100-130
PES	2.0	0.05MPa(25°C,Pure water)	180.5	100-130
PES	3.0	0.04MPa(25°C,Pure water)	309.4	100-130
PES	5.0	0.02MPa(25°C,Pure water)	361.0	100-130

ORDERING INFORMATION

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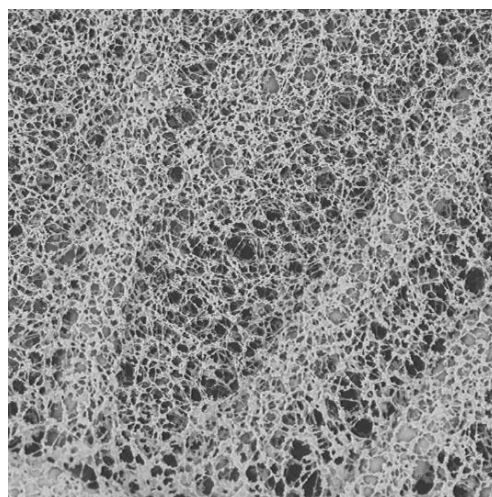


Supported MCE Membrane

Entegris provide supported naturally hydrophilic MCE (Mixed Cellulose Esters) filtration membrane.

MCE Filtration Membrane is internally supported with an inert polyester support web giving it added dimensional strength and stability that prevents cracking tearing, curling and breaking when handled or creased.

Naturally hydrophilic membrane designed to wet out evenly and does not require wetting agents that can interfere with biological processes.



APPLICATIONS

- Microbiological and particulate analysis
- Aqueous filtration
- Protein and enzyme filtration
- Biological fluid filtration

FEATURES & BENIFITS

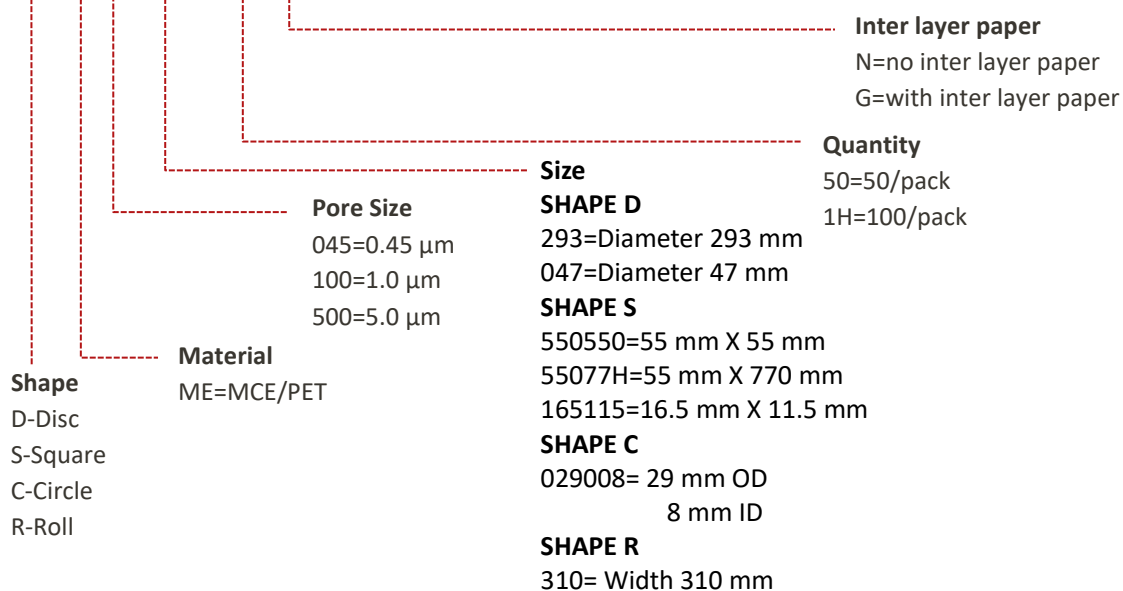
Hydrophilic	Eliminates the need for wetting agents that can potentially interfere with biological processes
Super strength	Eases handling when used with automated equipment
Lot-to-lot consistency	Quality checks ensure lot-to-lot consistency, both down and across the polyester web, for dependable results every time
Low extractables	Ensures tests will be clean and pure leading to more consistent results

SPECIFICATIONS

Material	Pore Size(μm)	Bubble point (\geq)	Flow Rate(\geq) mL/min/cm ² @ 0.093Mpa	Thickness(μm)
MCE/PET	0.1	0.40MPa(25°C,Pure water)	5.4	80-120
MCE/PET	0.22	0.31MPa(25°C,Pure water)	8.7	80-120
MCE/PET	0.45	0.15MPa(25°C,Pure water)	27.1	80-120
MCE/PET	0.65	0.12MPa(25°C,Pure water)	43.3	80-120
MCE/PET	0.8	0.10MPa(25°C,Pure water)	54.2	80-120
MCE/PET	1.0	0.08MPa(25°C,Pure water)	60.2	80-120
MCE/PET	1.2	0.06MPa(25°C,Pure water)	61.9	80-120
MCE/PET	3.0	0.04MPa(25°C,Pure water)	166.6	80-120
MCE/PET	5.0	0.025MPa(25°C,Pure water)	216.6	80-120

ORDERING INFORMATION

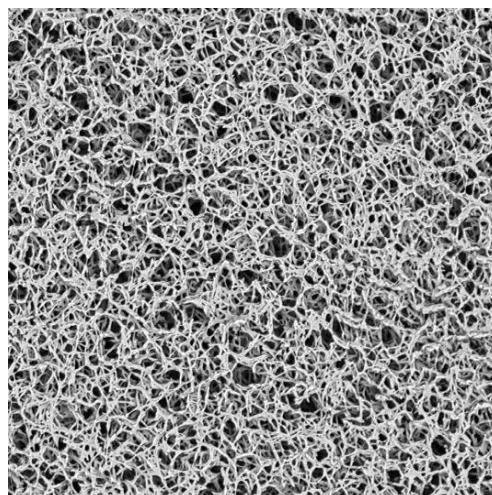
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Supported Nylon Membrane

Entegris provide supported naturally hydrophilic Nylon filtration membrane.

Nylon Filtration Membrane is internally supported with an inert polyester support web giving it added dimensional strength and stability that prevents cracking tearing, curling and breaking. Naturally hydrophilic membrane designed to wet out evenly and retain its superior strength during use in general filtration on medical assays, aggressive handling or automated equipment. A naturally hydrophilic membrane does not require wetting agents that can interfere with biological processes.



APPLICATIONS

- Filtration and clarification of aqueous and organic solvent solutions
- HPLC sample preparation

FEATURES & BENIFITS

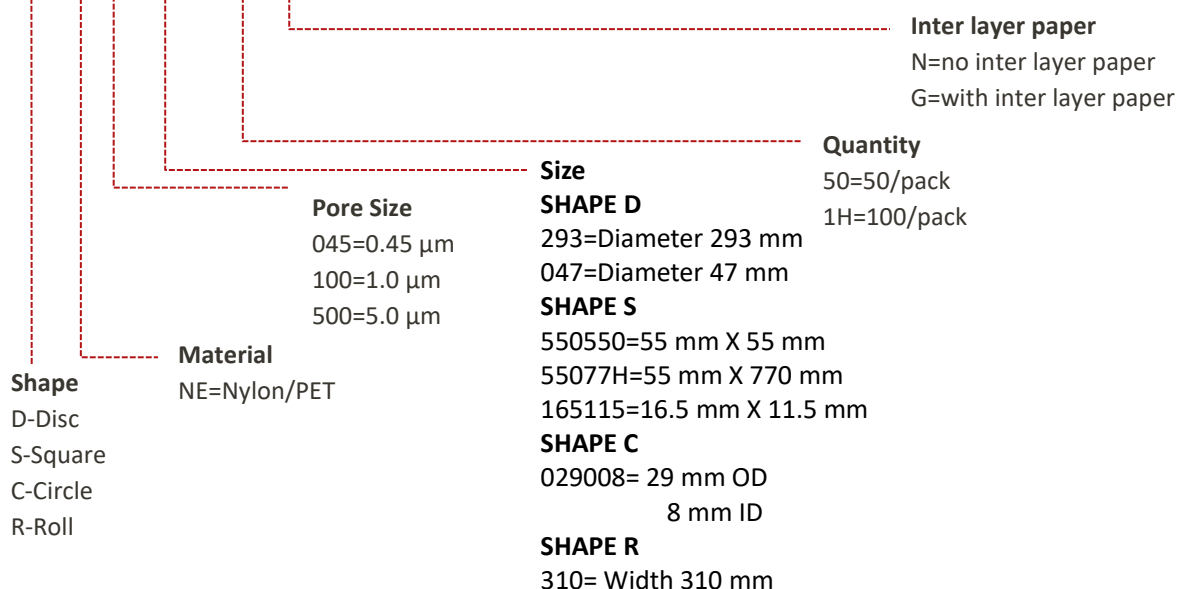
Hydrophilic	Eliminates the need for wetting agents that can potentially interfere with biological processes
Super strength	Eases handling when used with automated equipment
Lot-to-lot consistency	Quality checks ensure lot-to-lot consistency, both down and across the polyester web, for dependable results every time
Low extractables	Ensures tests will be clean and pure leading to more consistent results

SPECIFICATIONS

Material	Pore Size(μm)	Bubble point (\geq)	Flow Rate(\geq) mL/min/cm ² @0.093Mpa)	Thickness (μm)
Nylon/PET	0.1	0.40MPa(25°C,Pure water)	2.7	80-140
Nylon/PET	0.22	0.31MPa(25°C,Pure water)	3.9	80-140
Nylon/PET	0.45	0.15MPa(25°C,Pure water)	14.4	80-140
Nylon/PET	0.65	0.11MPa(25°C,Pure water)	24.1	80-140
Nylon/PET	0.8	0.10MPa(25°C,Pure water)	40.1	80-140
Nylon/PET	1.0	0.08MPa(25°C,Pure water)	40.1	80-140
Nylon/PET	1.2	0.06MPa(25°C,Pure water)	43.3	80-140
Nylon/PET	2.0	0.05MPa(25°C,Pure water)	108.3	80-140
Nylon/PET	3.0	0.04MPa(25°C,Pure water)	144.4	80-140
Nylon/PET	5.0	0.025MPa(25°C,Pure water)	240.7	80-140
Nylon/PET	10	0.015MPa(25°C,Pure water)	309.4	80-140

ORDERING INFORMATION

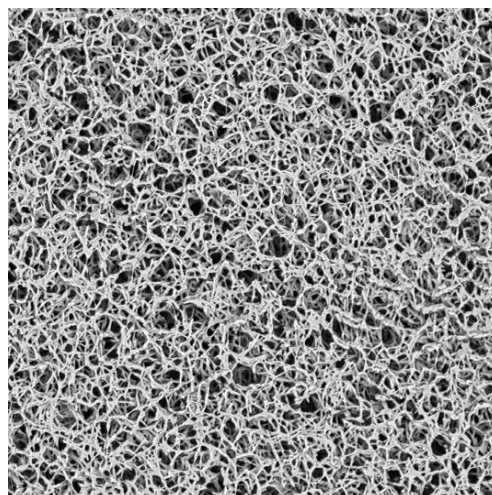
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Supported PES Membrane

Entegris provide supported naturally hydrophilic PES filtration membrane with support web.

PES supported membrane is internally supported with an inert polyester support web giving it added dimensional strength and stability that prevents cracking tearing, curling and breaking. Naturally hydrophilic membrane designed to wet out evenly and retain its superior strength during use in general filtration on medical assays, aggressive handling or automated equipment.



APPLICATIONS

- Filtration and clarification of aqueous and organic solvent solutions

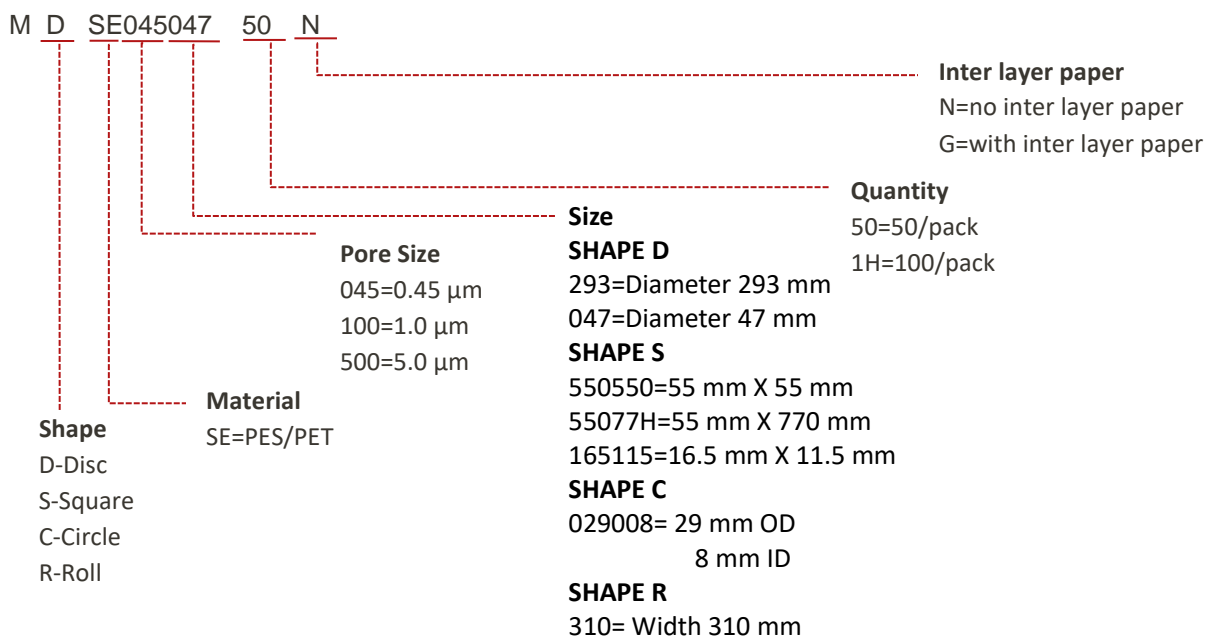
FEATURES & BENIFITS

Hydrophilic	Eliminates the need for wetting agents that can potentially interfere with biological processes
Super strength	Eases handling when used with automated equipment
Lot-to-lot consistency	Quality checks ensure lot-to-lot consistency, both down and across the polyester web, for dependable results every time
Low extractables	Ensures tests will be clean and pure leading to more consistent results

SPECIFICATIONS

Material	Pore Size(μm)	Bubble point (\geq)	Flow Rate(\geq) mL/min/cm ² @0.093Mpa)	Thickness (μm)
PES/PET	0.1	0.20MPa(25°C,99.7% Alcohol)	6.0	120-150
PES/PET	0.2	0.35MPa(25°C,Pure water)	14.9	120-150
PES/PET	0.22	0.35MPa(25°C,Pure water)	14.9	120-150
PES/PET	0.45	0.23MPa(25°C,Pure water)	34.9	120-150
PES/PET	0.65	0.18MPa(25°C,Pure water)	40.1	120-150
PES/PET	0.8	0.12MPa(25°C,Pure water)	69.9	120-150
PES/PET	1.0	0.08MPa(25°C,Pure water)	103.1	120-150
PES/PET	1.2	0.06MPa(25°C,Pure water)	103.1	120-150
PES/PET	2.0	0.05MPa(25°C,Pure water)	180.5	120-150
PES/PET	3.0	0.04MPa(25°C,Pure water)	309.4	120-150
PES/PET	5.0	0.02MPa(25°C,Pure water)	361.0	120-150

ORDERING INFORMATION

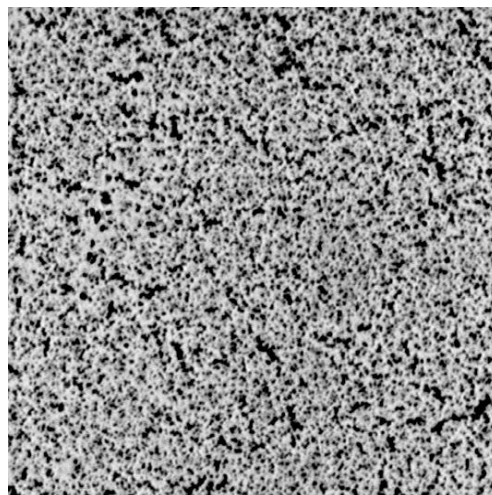


Supported PVDF Membrane

Entegris provide supported naturally hydrophobic PVDF filtration membrane.

PVDF Filtration Membrane is internally supported with an inert polyester support web giving it added dimensional strength and stability that prevents cracking tearing, curling and breaking.

PVDF membrane is made from polyvinylidene fluoride with good chemical compatibility. It's naturally hydrophobic and suitable for venting or gas/air filtration.



APPLICATIONS

- Organic solvent filtration
- Acids filtration
- Gas/air filtration

FEATURES & BENIFITS

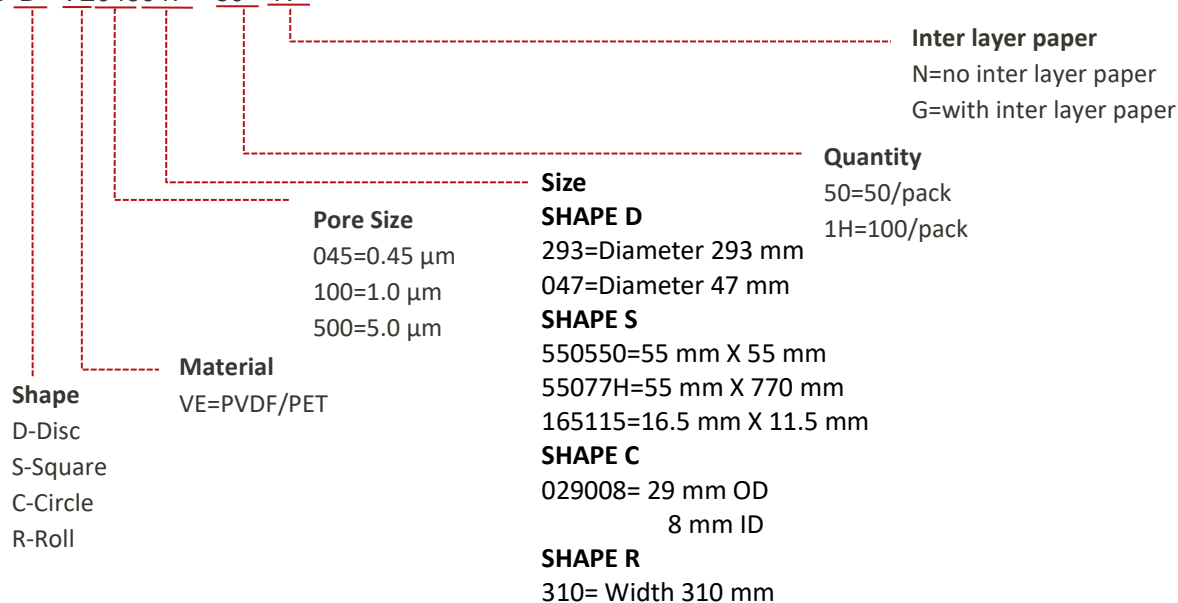
Naturally hydrophobic	Repels various fluid, preventing permeation
Super strength	Eases handling when used with automated equipment
Lot-to-lot consistency	Quality checks ensure lot-to-lot consistency, both down and across the polyester web, for dependable results every time
Good chemical resistance	Board chemical compatibility

SPECIFICATIONS

Material	Pore Size (μm)	Bubble point (\geq) (25°C, 99.7% Alcohol)	Flow Rate (\geq) mL/min/cm ² @0.093Mpa	Thickness (μm)
PVDF/PET	0.1	0.12MPa	3.6	85-140
PVDF/PET	0.22	0.07MPa	5.0	85-140
PVDF/PET	0.45	0.035MPa	9.8	85-140
PVDF/PET	0.65	0.03MPa	12.0	85-140
PVDF/PET	0.8	0.025MPa	19.7	85-140
PVDF/PET	1.0	0.02MPa	19.7	85-140
PVDF/PET	3.0	0.015MPa	33.3	85-140
PVDF/PET	5.0	0.01MPa	39.4	85-140

ORDERING INFORMATION

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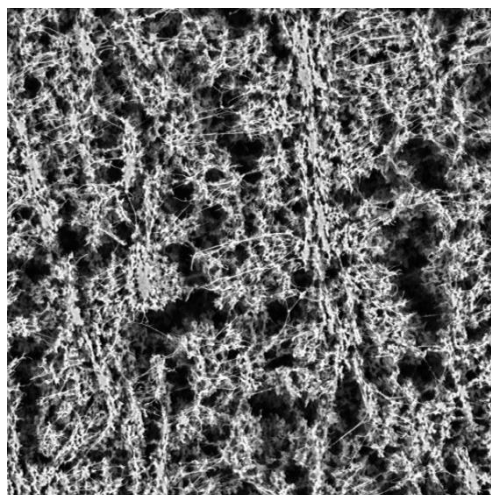


Laminated PTFE Membrane

Entegris provide naturally hydrophobic PTFE filtration membrane with improved durability and handling

PTFE is a naturally hydrophobic material of good compatibility with strong acid and aggressive solutions.

Entegris PTFE membrane is designed with high porosity for better permeation of gas and effective retention of particles. It is laminated to PP nonwoven support to provide easy handling and good strength.



APPLICATIONS

- Air and gas filtration
- Phase separation
- Venting applications

FEATURES & BENIFITS

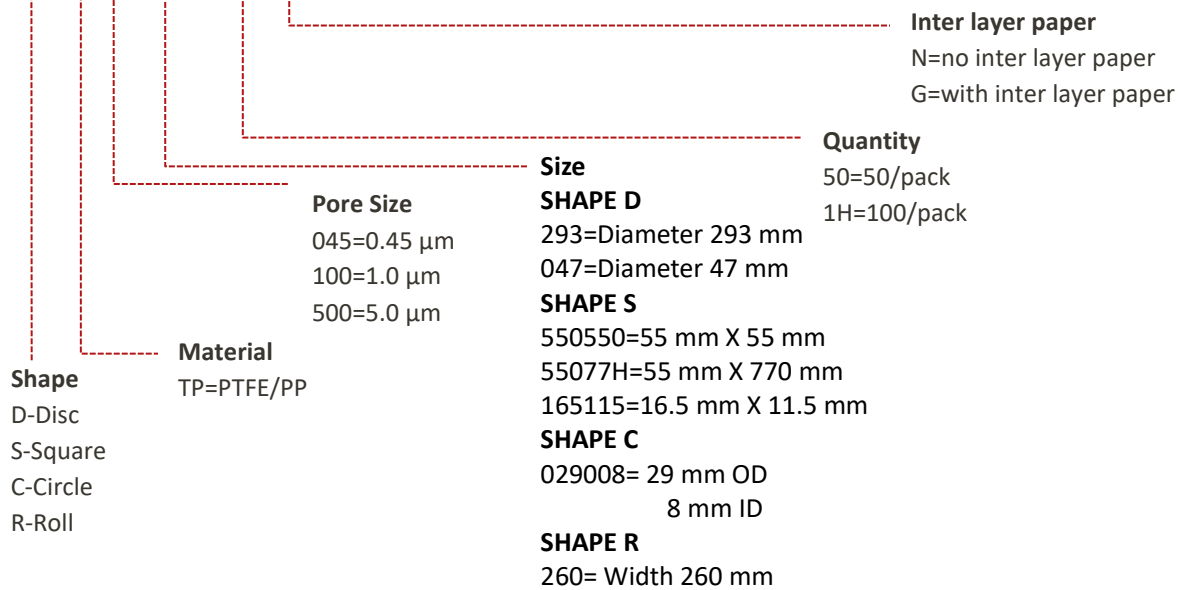
Hydrophobic	Naturally hydrophobic with inherent water resistance
3-dimensional web-like structure	Good particle retention rate for air and gas filtration
Improved strength	Eases handling when used with automated equipment
Lot-to-lot consistency	Quality checks ensure lot-to-lot consistency, both down and across the polyester web, for dependable results every time

SPECIFICATIONS

Material	Pore Size (μm)	Bubble Point(\geq) (25°C,99.7% Alcohol)	Flow Rate(\geq) mL/min/cm ² @0.093Mpa	Thickness(μm)
PTFE/PP	0.1	0.17MPa	4.3	150-310
PTFE/PP	0.22	0.13MPa	6.2	150-310
PTFE/PP	0.45	0.07MPa	30.9	150-310
PTFE/PP	1.0	0.05MPa	86.6	150-310
PTFE/PP	3.0	-	119.7	150-310
PTFE/PP	5.0	-	196.9	150-310
PTFE/PP	10	-	270.8	150-310

ORDERING INFORMATION

M D TP 045 047 50 N -A2

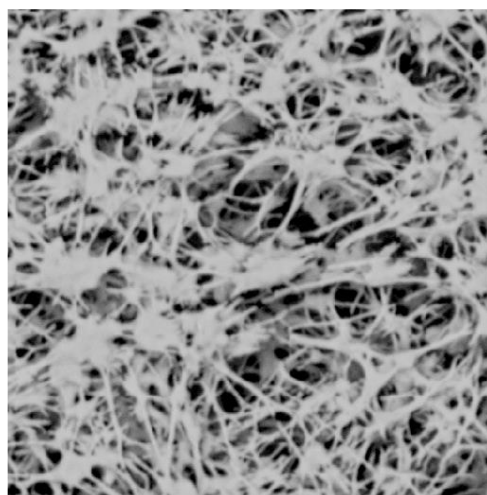


Laminated Hydrophilic PTFE Membrane

Entegris provide modified hydrophobic PTFE filtration membrane with improved durability and handling

Hydrophilic PTFE membrane is made from expanded polytetrafluoroethylene which provides a superior chemical compatibility with strong acid and aggressive solutions, it's modified into hydrophilic type thus no need to prewet before filtration.

It is laminated to PP nonwoven support to provide easy handling and good strength.



APPLICATIONS

- Aggressive acid filtration
- Aggressive bases filtration
- Organic solvents filtration

FEATURES & BENIFITS

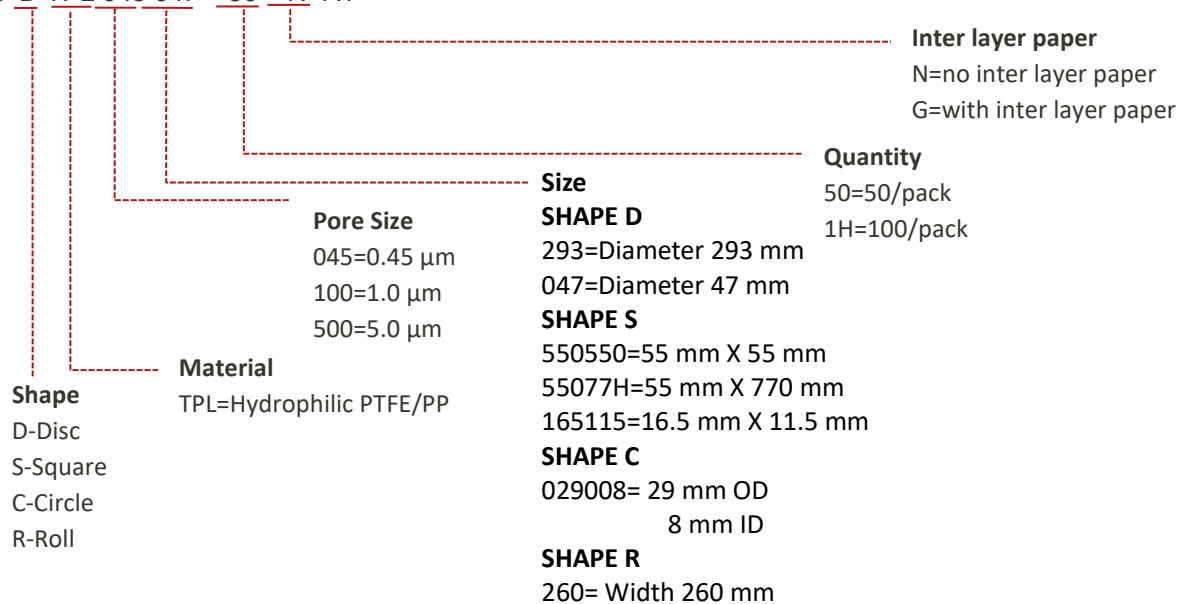
Hydrophilic modification	No need to prewet before filtration
3-dimensional web-like structure	Good particle retention rate for air and gas filtration
Improved strength	Eases handling when used with automated equipment
Lot-to-lot consistency	Quality checks ensure lot-to-lot consistency, both down and across the polyester web, for dependable results every time

SPECIFICATIONS

Material	Pore Size (μm)	Bubble Point(\geq) (25°C,99.7% Alcohol)	Flow Rate(\geq) mL/min/cm ² @0.093Mpa)	Thickness(μm)
PTFE/PP	0.1	0.17MPa	18.0	150-310
PTFE/PP	0.22	0.13MPa	21.6	150-310
PTFE/PP	0.45	0.07MPa	39.4	150-310
PTFE/PP	1.0	0.05MPa	54.2	150-310
PTFE/PP	3.0	-	119.7	150-310
PTFE/PP	5.0	-	196.9	150-310

ORDERING INFORMATION

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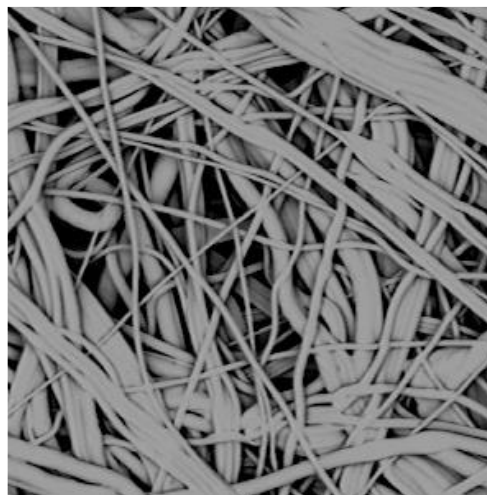


PP Membrane

Entegris provide PP depth filter media.

PP depth filter media is comprised of polypropylene fibers. It traps particles when they pass through. The tortuous path between PP fibers gives high dirt holding capacity and long service life.

The PP filter media exhibit negligible protein binding, which is essential for maximum sample recovery of critical, small volume protein samples.



APPLICATIONS

- High viscosity filtration
- Particle-laden solution filtration
- Aqueous and organic solvent solutions
- Total digest for heavy metals

FEATURES & BENIFITS

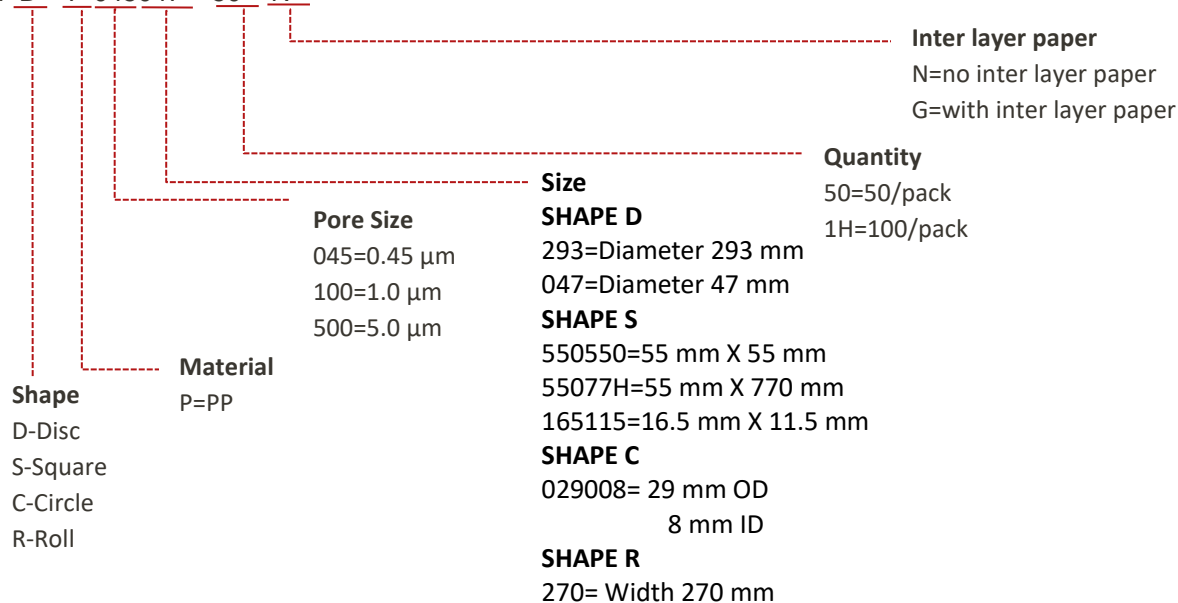
Broad chemical compatibility	Allows its use with aqueous and organic solvent samples
Low extractables	Provide accurate, consistent analysis result for sensitive applications.
Lot-to-lot consistency	Quality checks ensure lot-to-lot consistency.

SPECIFICATIONS

Material	Pore Size (μm)	Bubble point (\geq) (25°C, 99.7% Alcohol)	Flow Rate (\geq) mL/min/cm ² @0.093Mpa	Thickness (μm)
PP	0.1	0.02MPa	10.8	100-300
PP	0.22	0.014MPa	72.2	100-300
PP	0.45	0.009MPa	108.3	100-300
PP	1.0	0.004MPa	144.4	100-300
PP	3.0	0.0035MPa	216.6	100-300
PP	5.0	0.003MPa	270.8	100-300
PP	10	0.001MPa	309.4	100-300
PP	20	-	333.2	100-300
PP	30	-	361.0	100-300

ORDERING INFORMATION

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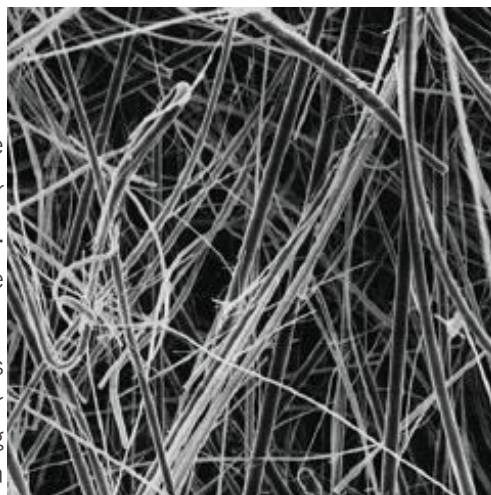


Glass fiber (GF) filter without binder

Entegris provide glass microfiber filters without binders, which is ideal medium for further analysis.

Glass microfiber filters offered in this product range are produced from 100% borosilicate glass microfiber without the use of binders or strengthening agents. These filters offer many advantages in a wide range of analytical applications.

The fibers used to manufacture these depth filters are smooth and uniform. This permits their characteristically high flow rates while allowing retention of exceptionally small particles and high load capacity.



APPLICATIONS

- Filtering viscous or high particle laden solution
- Ambient air monitoring
- Clarification
- Pre-filter of membrane

FEATURES & BENIFITS

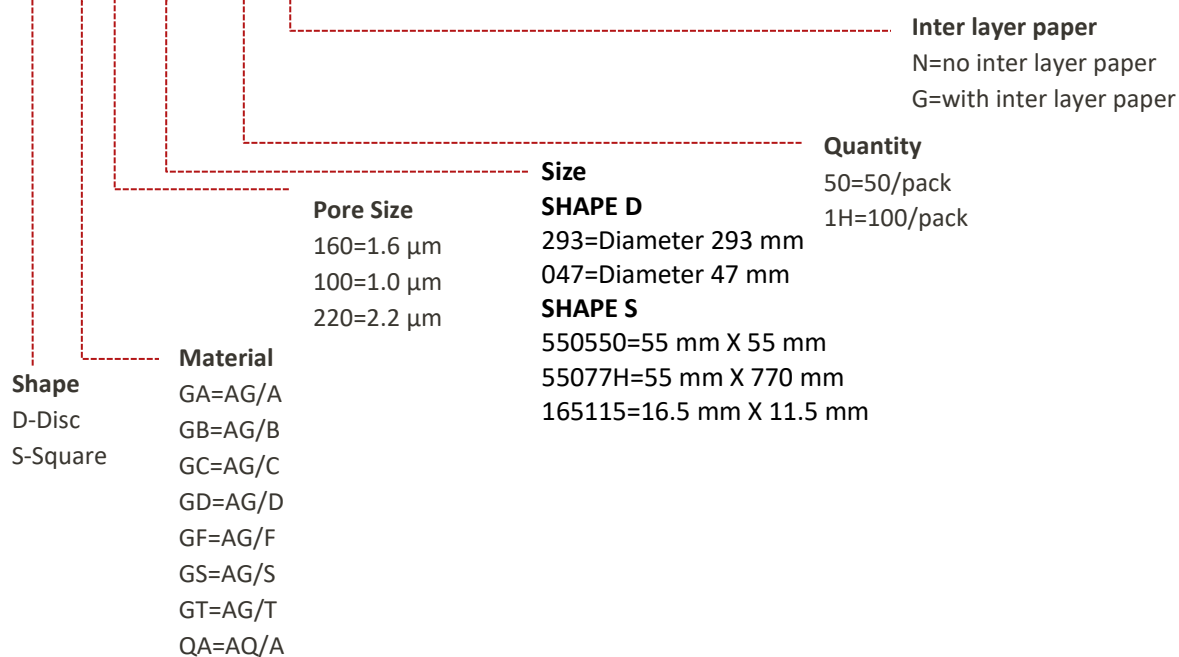
Depth structure	High load capacity
Broad temperature range	Temperature up to 1000°C
Lot-to-lot consistency	Quality checks ensure lot-to-lot consistency.

SPECIFICATIONS

Grade	Material	Particle Retention (μm)	Weight (g/m^2)	Thickness (μm)
AG/A	Binderless borosilicate glass microfiber	1.6	≥ 45	200-400
AG/B	Binderless borosilicate glass microfiber	1.0	≥ 130	550-750
AG/C	Binderless borosilicate glass microfiber	1.2	≥ 45	180-380
AG/D	Binderless borosilicate glass microfiber	2.7	≥ 110	500-700
AG/F	Binderless borosilicate glass microfiber	0.7	≥ 65	320-520
AG/S	Binderless borosilicate glass microfiber	2.0	≥ 60	240-440
AG/T	Binderless borosilicate glass microfiber	1.5	≥ 85	330-530
AQ/A	Binderless quartz glass microfiber	2.2	≥ 75	400-600

ORDERING INFORMATION

EMD GA160047 50 N

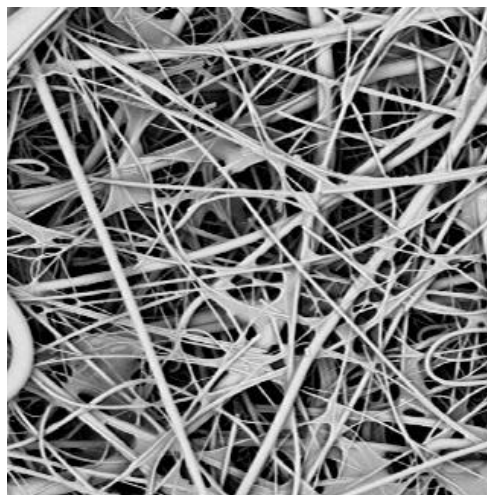


Glass fiber (GF) filter with binder

Entegris provide glass microfiber filters with binders.

This GF filter with organic binder has higher tensile strength. It's suitable for long period and high flow rate fluid filtration.

This is a hydrophobic glass microfiber filter membrane, which has low adhesion, good weight stability and mechanical stability, and can withstand high temperatures of 180 °C.



APPLICATIONS

- Online monitoring of PM2.5/PM10
- Ambient air monitoring

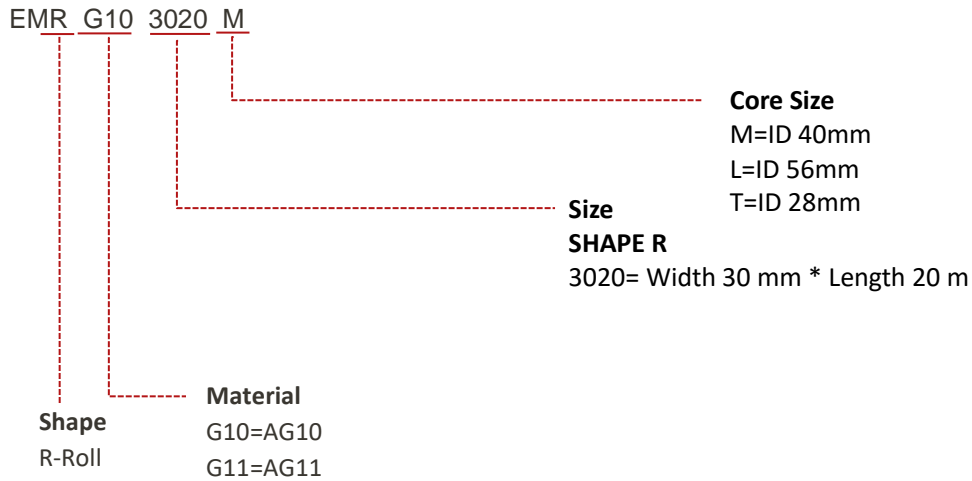
FEATURES & BENIFITS

Depth structure	High load capacity
Broad temperature range	Temperature up to 1000°C
Lot-to-lot consistency	Quality checks ensure lot-to-lot consistency.

SPECIFICATIONS

Grade	Material	Particle Retention (μm)	Weight (g/m^2)	Thickness (μm)
AG10	Borosilicate glass microfiber with binder	-	≥ 40	150-350
AG11	Borosilicate glass microfiber with binder			

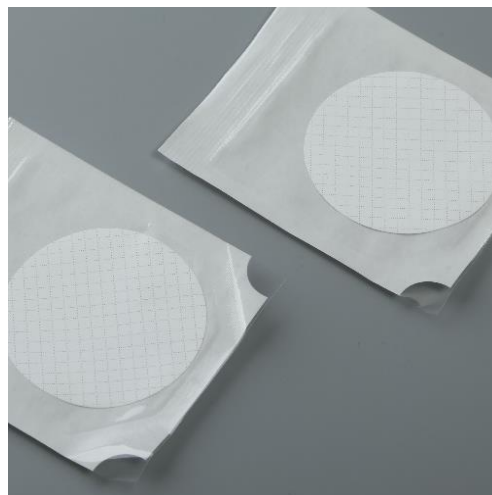
ORDERING INFORMATION



MCE Grid Membrane

Entegris provide unsupported naturally hydrophilic MCE (Mixed Cellulose Esters) filtration membrane.

Membrane filtration method is an international recognized standard, and widely applied in environmental water monitoring fields. Entegris gridded membranes consist of mixed cellulose esters, and specially optimized for membrane filtration method. The manufacturing process is under strictly quality control and streamline traceable, providing customers with consistent quality products.



APPLICATIONS

- Colony counting in bioburden testing
- Microbiology testing

FEATURES & BENIFITS

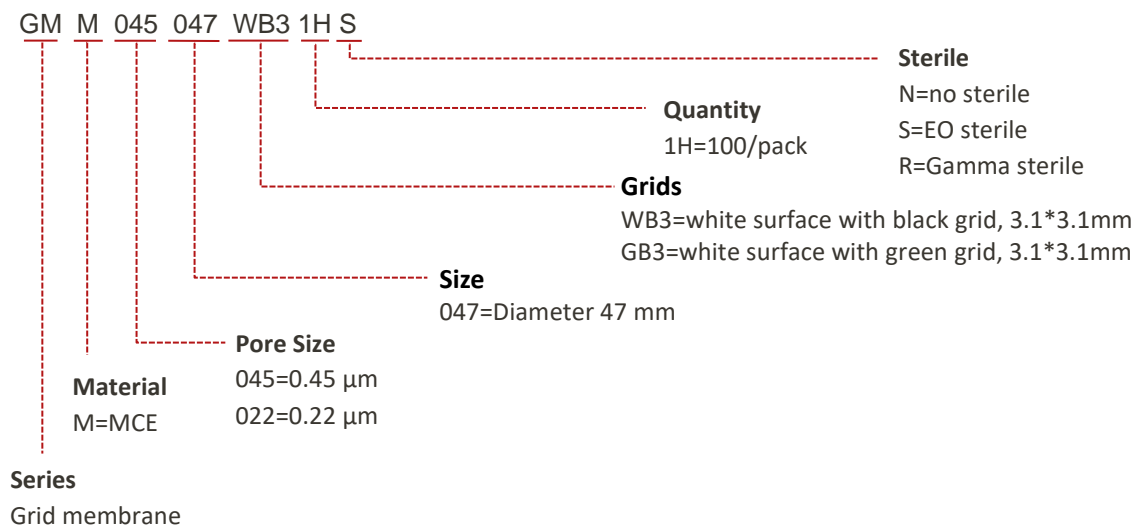
Gridded membrane	Easy for colony counting
No antibacterial components	Excellent bacterial recovery
Lot-to-lot consistency	Quality checks ensure lot-to-lot consistency
Multiple pore sizes	Meeting a variety of needs

SPECIFICATIONS

Material	Pore rating(μm)	Bubble point (\geq)	Flow Rate(\geq) mL/min/cm ² @0.093Mpa)	Thickness (μm)
MCE	0.22	0.31MPa(25°C,Pure water)	43.3	100-155
MCE	0.45	0.23MPa(25°C,Pure water)	33.3	100-155
MCE	0.8	0.12MPa(25°C,Pure water)	77.4	100-155

ORDERING INFORMATION

GM M 045 047 WB3 1H S



PM2.5 PTFE Membrane

Entegris provide glass microfiber filters with binders.

PM2.5 monitoring membrane are manufactured according to US EPA 40 CFR Part 50, Appendix L. The thin, high purity and high retentive PTFE film are sequentially numbered and supported with a chemical resistant polypropylene support ring.



APPLICATIONS

- PM2.5 ambient air monitoring

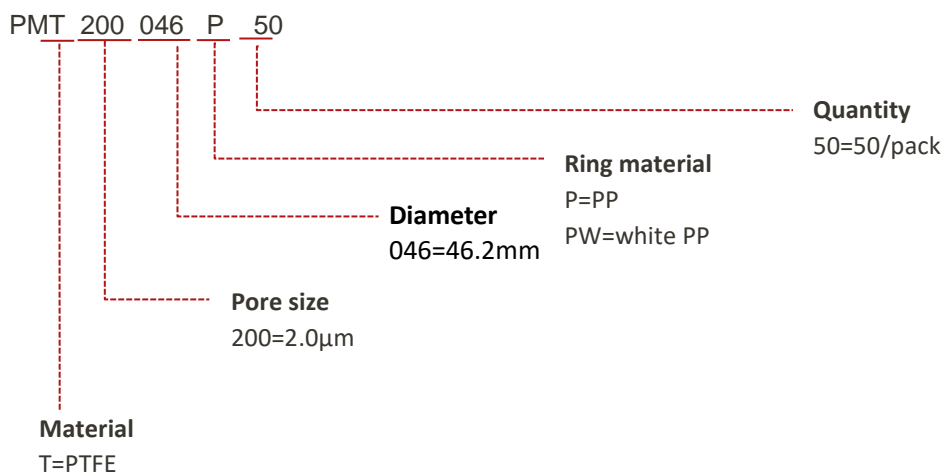
FEATURES & BENIFITS

Sequentially numbered on each membrane	Easily tacking
Supporting design eliminates curling	Easy for manual and automation operation
High quality membrane	Excellent chemical and thermal stability, high retention

SPECIFICATIONS

Material	High-purity PTFE
Pore size	2.0 μ m
Support ring material	PP
Filter diameter	46.08-46.20mm
Filter thickness	30-50 μ m
Support ring thickness	0.36-0.42mm
Support ring width	3.32-3.46mm
Collection efficiency (0.3 μ m DOP)	> 99.7%
Pressure drop and flow rate @ 16.67L/min	< 30cm H ₂ O column
Filter Weight stability	< 20 μ g
Temperature stability	< 20 μ g
Humidity-induced weight increases stability	< 10 μ g

ORDERING INFORMATION



PTFE Filter Tape

Effectively captures metallic and organic contaminants for environmental monitoring XRF analysis.

In response to the worldwide concern over toxic air pollutants and R&D efforts to study emissions and pollution sources, we have developed PTFE filter tape specially designed for use in X-ray fluorescence (XRF) spectrometry to monitor metallic contaminants in an air stream. Contaminants are captured in the tape's porous membrane structure in preparation for element analysis.

Our filter tape has extremely low metal content with efficient air flow capability and a retention rating of 99.7% with 0.3 μm particles. We offer Type I and Type II tape to meet your specific needs for use in air monitoring stations and in monitoring equipment, respectively. Both types come in standard widths and lengths, with custom sizes available upon request.



APPLICATIONS

- Metallic monitoring with XRF spectroscopy
- Air quality monitoring stations
- XRF monitoring equipment

FEATURES & BENEFITS

Thin, PTFE membrane with no depth filter membrane support	Has low metal content, producing a low noise-to-monitoring ratio
Unique stretching technology	Is highly pliable and easy to use
Uniform porous membrane structure	Enables reliable analysis results
Optimal pore size	Provides efficient particle retention for total suspended particulate (TSP), inhalable particulate material $\leq 10 \mu\text{m}$ (PM10) and $\leq 2.5 \mu\text{m}$ (PM2.5)

SPECIFICATIONS

Materials of construction	Membrane	PTFE
	Core	HDPE
Retention rating	2µm	
Dimensions*	Width	19 mm (0.75"), 20 mm (0.79"), 30 mm (1.18")
	Length	30 m (98.4'), 33 m (108.3'), (40 m (131.2'), 100 m (328.0')
	Core inner diameter	41.2 mm (1.62"), 52.8 mm (2.08")

*Width, length, and diameter may be customized. Contact Entegris with your requirements.

Typical Membrane Characteristics and Performance

	Type I (T1)	Type II (T2)
Retention rating		2 µm
Thickness	50 µm	70 µm
Gurley (s, 300 cc/1 in₂ @ 4.88 inches H₂O)	2.4	2.6
Particle retention (0.3 µm)		≥99.7%

ORDERING INFORMATION

PART NUMBER	WIDTH	LENGTH	CORE INNER DIAMETER
EMRT2001930T4-AT2	19mm (0.75")	30m (98.4")	52.8mm (2.08")
EMRT2001940T4-AT2	19mm (0.75")	40m (131.2')	52.8mm (2.08")
EMRT2002030T4-AT2	20mm (0.79")	30m (98.4")	52.8mm (2.08")
EMRT200301HT3-AT1	30mm (1.18")	100m (328.0')	41.2mm (1.62")
EMRT2003033T3-AT1	30mm (1.18")	33m (108.3')	41.2mm (1.62")

Qualitative Filter Paper

Entegris provide Qualitative filter papers.

Qualitative filter papers are manufactured from high-quality cotton linters with unique paper-making technology and advanced paper-making equipment.

Qualitative filter papers are used in qualitative analytical techniques and filtration precipitation or suspended substance in a solution.

APPLICATIONS

- Qualitative analytical techniques to pre-treatment
- Precipitation and solid-liquid phase separation and purification
- Chemical analysis of chemical industry, metallurgy, pharmacy, mine etc.

FEATURES & BENIFITS

Controlled and uniform absorption

Purity and filler-free

Good wet strength

Consistent density

SPECIFICATIONS

Type	Standard	Nominal Basis Weight (g/m ²)	Typical Particle Retention in Liquid(μm)	Filtration time(s)	Burst(ing) strength (>mm water)	Nominal Ash Content(<%)
101	Fast flow		20~25	≤35	120	
102	Medium flow	80±4	4~12	35-70	140	0.15
103	Slow flow		< 3	70-140	180	

ORDERING INFORMATION

PART NO.	DESCRIPTION	QTY
101DXF1251HN	Rapid Qualitative Filter Paper, Disc,125mm	100/PK
102DXM0901HN	Medium speed Qualitative Filter Paper, Disc,090mm	100/PK
102DXM1101HN	Medium speed Qualitative Filter Paper, Disc,110mm	100/PK
102DXM1251HN	Medium speed Qualitative Filter Paper, Disc,125mm	100/PK
102DXM60601HN	Medium speed Qualitative Filter Paper, Disc,600mm*600mm	100/PK

Quantitative Filter Paper

Entegris provide Quantitative filter papers.

Quantitative filter papers are manufactured from good-quality cotton with advanced producing and post-treatment process. There is litter ash content after firing, and there is hardly effect on the analysis results. Quantitative filter papers are suitable for precise quantitative analysis.

APPLICATIONS

- Precise quantitative analysis
- Liquid purification
- Analysis and separation air and water analysis

FEATURES & BENIFITS

Controlled and uniform absorption

Purity and filler-free

Good wet strength

Consistent density

SPECIFICATIONS

Type	Standard	Nominal Basis Weight (g/m ²)	Typical Particle Retention in Liquid(μm)	Filtration time(s)	Burst(ing) strength (>mm water)	Nominal Ash Content(<%)
201	Fast flow		20~25	≤35	120	
202	Medium flow	80±4	4~12	35-70	200	0.01
203	Slow flow		< 3	70-140	280	

ORDERING INFORMATION

Part No.	Description	QTY
202DLM0901HN	Medium speed Quantitative Filter Paper, Disc,090mm	100/PK
202DLM1101HN	Medium speed Quantitative Filter Paper, Disc,110mm	100/PK
202DLM1251HN	Medium speed Quantitative Filter Paper, Disc,125mm	100/PK
202DLM1501HN	Medium speed Quantitative Filter Paper, Disc,150mm	100/PK
203DLM1101HN	Low speed Quantitative Filter Paper, Disc,110mm	100/PK
203DLM1251HN	Low speed Quantitative Filter Paper, Disc,125mm	100/PK

Syringe Filter

Entegris provide various type of syringe filter for various applications.

Syringe filter are widely applicated in HPLC, UHPLC as particle removal to ensure accuracy and protect equipment.

Entegris syringe filter has broad chemical resistance with polypropylene housing, providing customized solutions to specific applications with a variety of filtration materials and pore size options.



APPLICATIONS

- Sample preparation of HPLC, UHPLC, dissolution test
- Sample preparation of ICP-MS analyzing
- Liquid Sterile Filtration
- Liquid prefiltration, clarification or fine particle removal
- Venting and gas filtration
- IC chromatography
- Automation systems

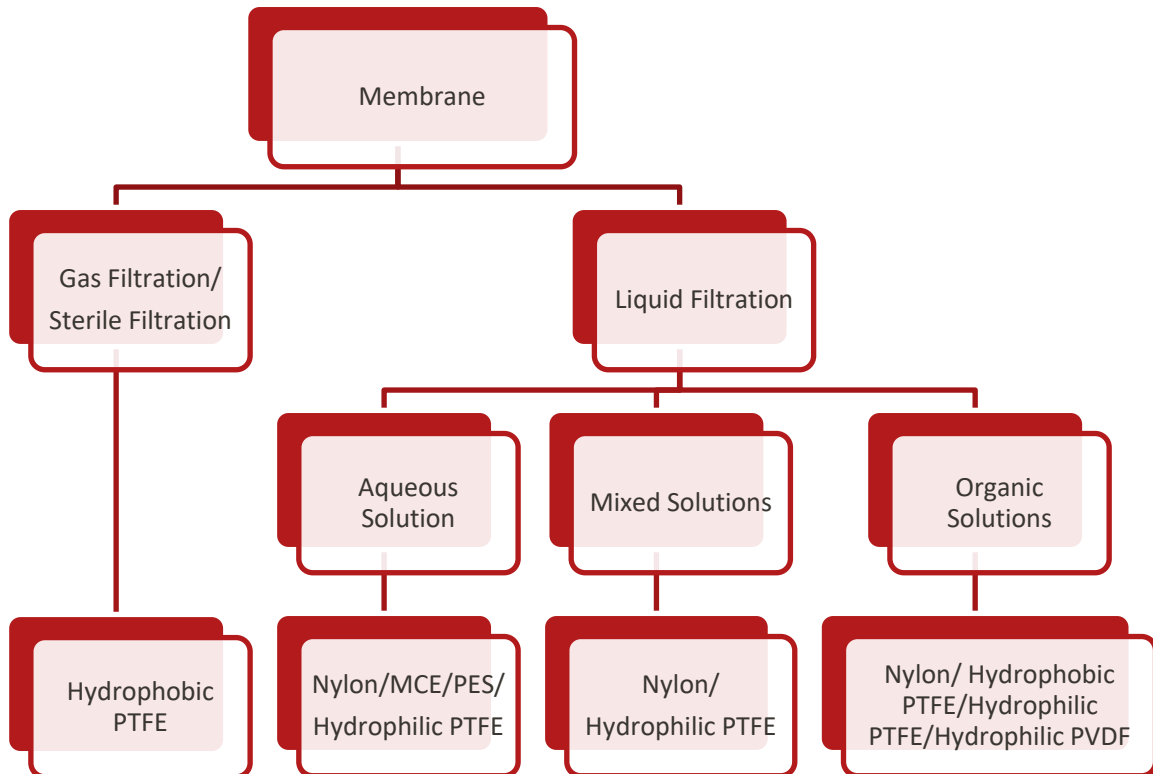
FEATURES & BENIFITS

Lot-to-lot consistency	Quality checks ensure lot-to-lot consistency.
Manufactured in controlled environment	Reliable performance by using automated process.
Low extractables, low binding	A variety of membranes and housings ensure chemical compatibility with a range of samples and solvents.

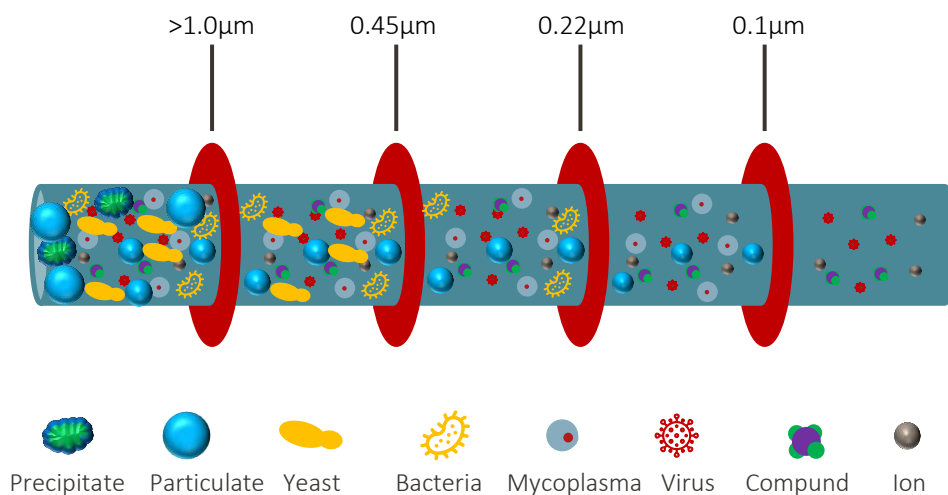
SPECIFICATIONS

Quick-selection Guide




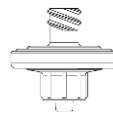
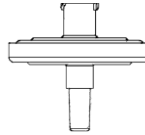
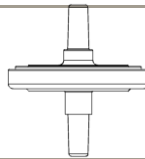
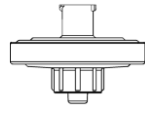
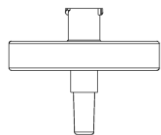
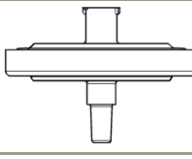
(1) Filter Material



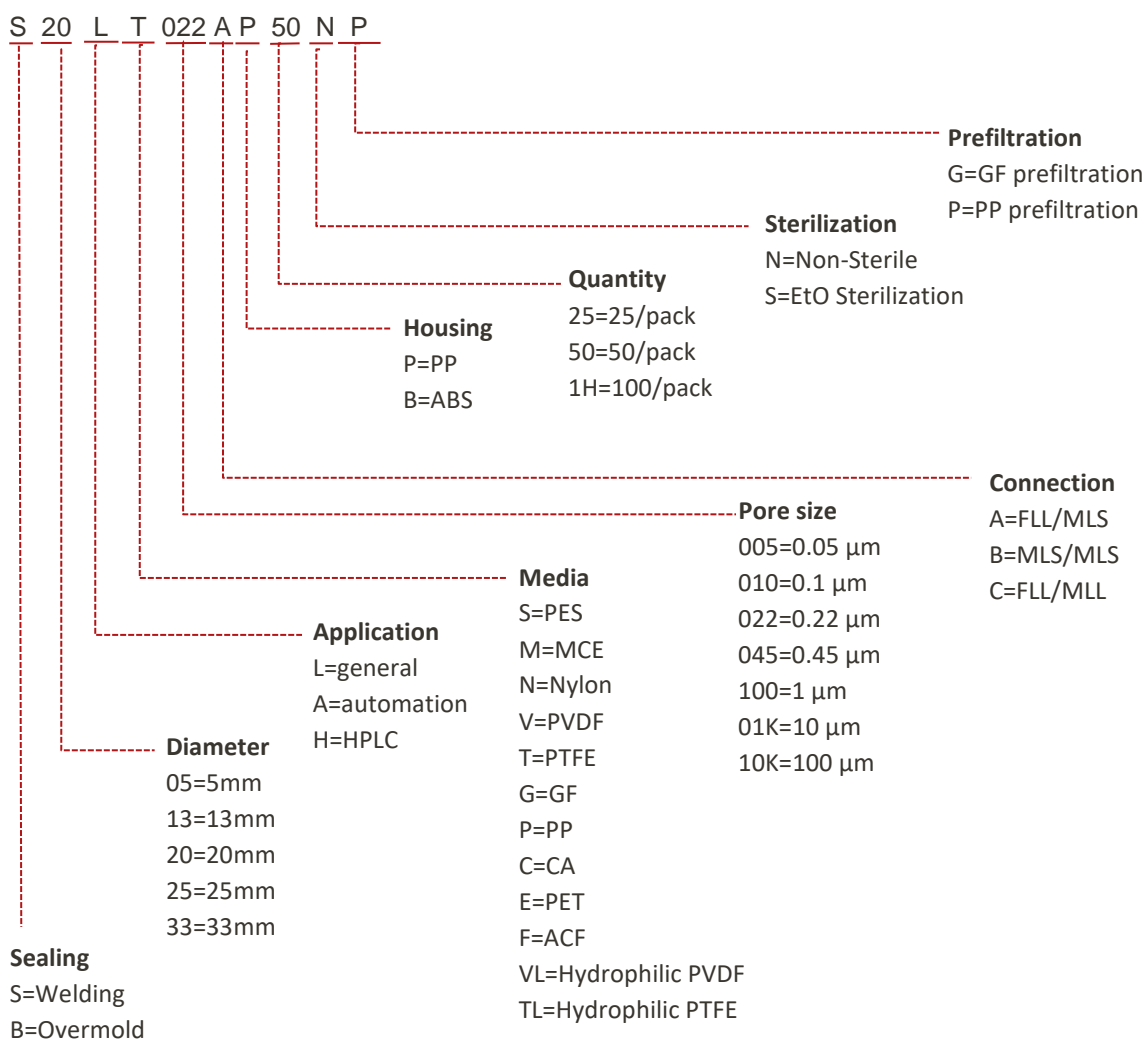
(2) Pore size and application



(3) By process volume, dimension, connection and maximum operating pressure, etc.

Type	Width x Length mm x mm	Connector Size Inlet/Outlet	Effective Filtration Area (cm ²)	Process Volume (mL)	Pressure Resistance (KPa)	Dimension
5mm A	12 x 17	FLL/MLS	0.2	<2	500	
13mm A	16 x 23	FLL/MLS	0.87	<10	500	
13mm Overmold	16.5 x 19.45	FLL/MLS	0.87	<10	500	
20mm C	25.2 x 23	FLL/MLL	3.14	<100	300	
25mm A	28.8 x 26	FLL/MLS	3.8	<100	500	
25mm B	29 x 31	MLS/MLS	3.8	<100	500	
25mm C	28.6 x 21.8	FLL/MLL	3.8	<100	500	
25mm Overmold	29 x 22	FLL/MLS	3.8	<100	500	
33mm A	40 x 30	FLL/MLS	8.04	<150	300	

ORDERING INFORMATION



50mm Disc Filter

Entegris provide vent filters which are individually packaged either sterile or non-sterile.

The 50mm diameter filter has an excellent moisture barrier PTFE membrane which is suitable for venting and gas filtration (0.22µm for sterilization). Typical applications are in-line air/gas filtration, venting of fermentation tank or bioreactor, and in-line vacuum pump protection, etc.



APPLICATIONS

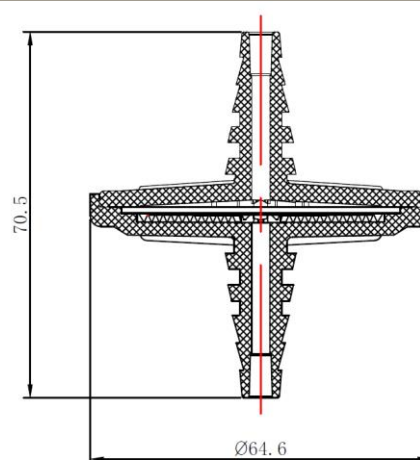
- Autoclave venting
- In-line sterilization of and particulate removal from air and gases
- Sterile filtration of non-aqueous fluids
- Sterile venting

FEATURES & BENIFITS

Chemical Resistance	PTFE membrane and polypropylene housing have broad chemical resistance
High throughput	Large surface area provides greater throughput and high air flow rate
Lot-to-lot consistency	Quality checks ensure lot-to-lot consistency

SPECIFICATIONS

Housing Material	PP
Width x Length (mm x mm)	64.6*70.5
Connector Size	7-13mm stepped hose barb connection with inner 6:100 luer slip
Effective Filtration Area (cm²)	19.6
Max Working Temperature (°C)	60
Pressure Resistance (KPa)	300



ORDERING INFORMATION

F5LT 045 PN-A1C

