

PROUDLY MADE IN  
**india**

**BOROSIL®**

**BORO PURE**  
Filtration System



Made from 3.3 Low Expansion  
Borosilicate Glass



- FILTER MEMBRANES

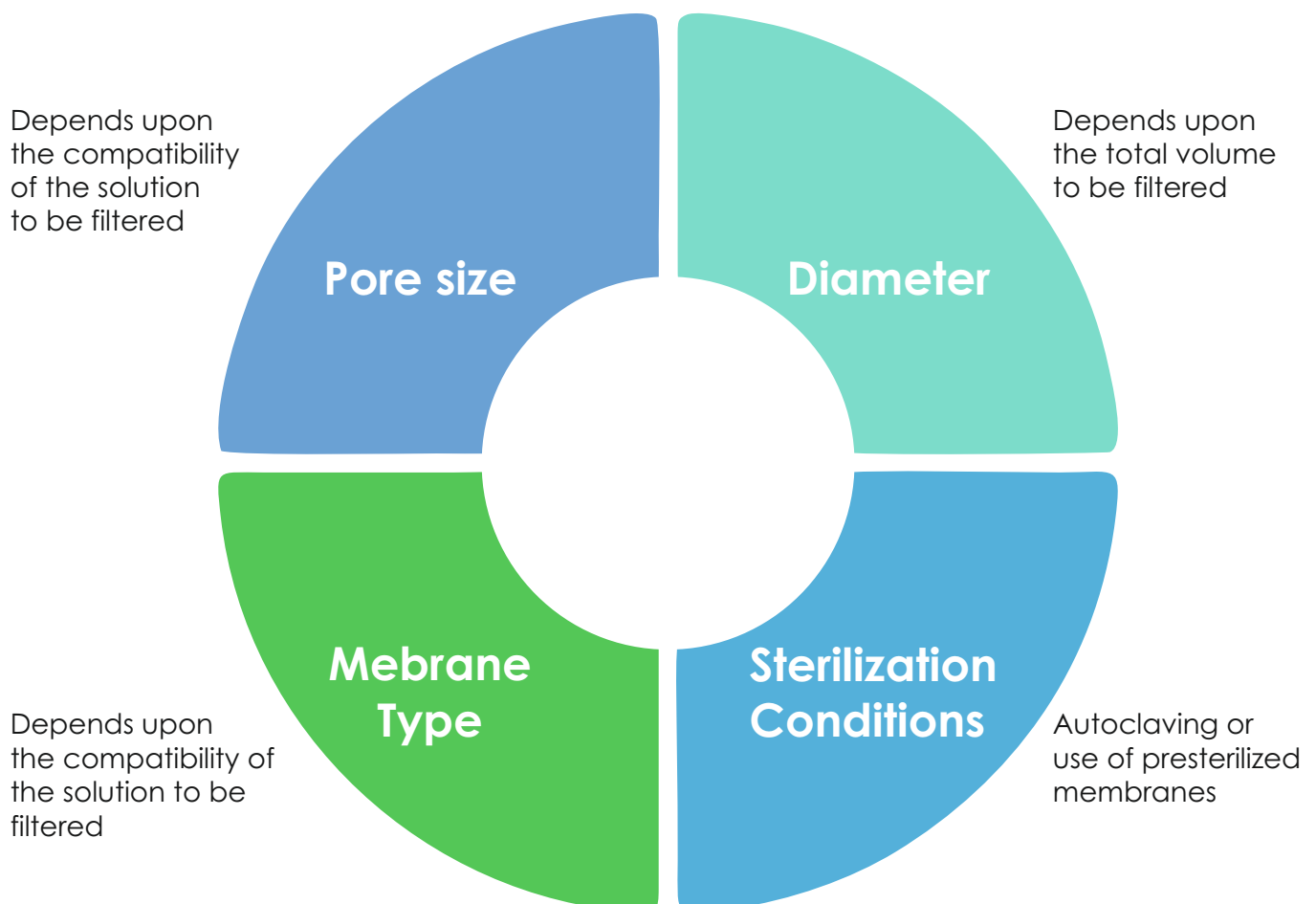
## Filter Membranes

Filter membranes as a new offering from Borosil which includes membrane for applications such as HPLC mobile phase filtration, analysis of particulate or biological contaminants, small volume filtration and sterile filtration of media and buffer.

Membrane filtration is technique to separate particles in any liquid. It works by retaining the particles larger than the pore size of the membrane while allowing smaller molecules to pass through it.

### How to choose the right filter membrane?

Selection of the filter membrane on the following factors



## Filter Membranes

### Cellulose Nitrate Membrane, **PLAIN**

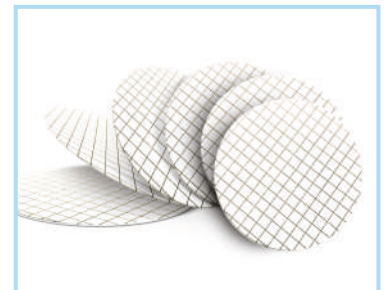
- Hydrophilic in nature and biologically inert
- High retention and high flow rate
- Recommended for applications like clarification and sterilization of media, reagents, sterility testing of water or other products
- Autoclavable at 121°C for 30 mins for sterilization



Speci	514722N	514745N
Pore Size	0.22 µm	0.45 µm
Diameter	47 mm	
Water	20.0 ml/min/cm <sup>2</sup>	45.0 ml/min/cm <sup>2</sup>
Bubble Point	>= 52psi	>= 30 psi
Maximum Operating Temperature	80°C continuous	
Retention ef	LRV > 7 for B. Diminuta	LRV > 7 for S. Marcescens
Sterility	Non -sterile	
Quantity per pack	100 Membranes	
Quantity per Case	5 Packs of 100 Membranes each	

### Cellulose Nitrate Membrane, **GRIDDED**

- Hydrophilic in nature and biologically inert
- High retention and high flow rate
- White membrane with black grids that makes colony counting easier
- Grids do not inhibit the growth of microorganisms
- Recommended for applications like sterility testing of water or other products
- Autoclavable at 121°C for 30 mins for sterilization



Speci	514722N	514745N
Pore Size	0.22 µm	0.45 µm
Diameter	47 mm	
Water	20.0 ml/min/cm <sup>2</sup>	45.0 ml/min/cm <sup>2</sup>
Bubble Point	>= 52psi	>= 30 psi
Maximum Operating Temperature	80°C continuous	
Retention ef	LRV > 7 for B. Diminuta	LRV > 7 for S. Marcescens
Sterility	Non -sterile	
Quantity per pack	100 Membranes	
Quantity per Case	5 Packs of 100 Membranes each	

## Nylon-66 Membrane, HPLC GRADE

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- Wide chemical compatibility and resistant to strong solvents and alcohols
- Recommended for applications like clarification of aqueous and organic HPLC mobile phase solvents, HPLC sample preparations
- Tested for extractables and particles release, suitable for HPLC application
- Autoclavable at 121°C for 30 mins for sterilization



Specifications	534722N	534745N
Pore Size	0.22 µm	0.45 µm
Diameter	47 mm	
Water flow rate	12.0 ml/min/cm <sup>2</sup>	32.0 ml/min/cm <sup>2</sup>
Bubble Point	>= 52psi	>= 30 psi
Maximum Operating Temperature	80°C continuous	
Extractables with Water	Within limits specified of USP	
Sterility	Non -sterile	
Quantity per pack	100 Membranes	
Quantity per Case	5 Packs of 100 Membranes each	

For membranes of other types, diameter and pore sizes , please contact our sales representative



Pack of 100 Membranes

## Filter Membrane compatibility Chart

Name of the chemical	Nylon - 66	PTFE	PVDF	PES	Cellulose Nitrate
<b>Acids</b>					
Acetic, 10%	C	C	C	C	C
Boric, 5%	L	C	C	C	C
Hydrochloric, 25%	L	C	C	C	N
Hydrochloric, Concentrated	N	L	L	C	N
Sulfuric, 25%	N	C	C	C	C
Sulfuric, Concentrated	N	N	L	N	N
Nitric, 25%	N	L	L	L	C
Nitric, Concentrated	N	L	L	N	N
Phosphoric acid, 25%	N	C	–	C	L
<b>Bases</b>					
Potassium hydroxide, 6N	C	C	–	C	N
Sodium Hydroxide, 3N	C	C	C	C	N
Ammonium Hydroxide, 25%	C	C	L	C	N
<b>Alcohols</b>					
Amyl Alcohol	C	C	C	C	–
Benzyl Alcohol	L	C	C	N	L
Butyl Alcohol	C	C	–	C	–
Ethanol, 70%	C	C	C	C	N
Ethanol, 98%	C	C	C	L	N
Ethylene Glycol	C	C	C	C	–
Glycerol	L	C	–	C	L
Isopropanol	C	C	C	C	L
Methanol, 98%	C	C	C	C	N
n-Propanol	C	C	C	C	–
Propylene Glycol	C	C	C	C	–
<b>Hydrocarbons</b>					
Benzene	C	C	C	N	C
Hexane Xylene	C	C	C	N	C
Kerosene Gasoline	C	C	C	L	–
Tetralin, Decalin	C	C	C	N	–
Toluene	C	C	C	N	C
<b>Halogenated Hydrocarbons</b>					
Carbon Tetrachloride	C	C	C	N	C
Chlorobenzene (Mono)	C	C	C	L	–
Chloroform	L	C	C	N	N
Freon	C	C	C	L	–
Methylene Chloride	L	C	C	N	–

C = Compatible  
 N = Not compatible  
 L = Limited Compatibility  
 – = No data available

The information in this chart is to be used ONLY as a guide in selecting membrane for appropriate chemical compatibility. ALWAYS test under the specific conditions of your application before use.

## Filter Membrane compatibility Chart

Name of the chemical	Nylon - 66	PTFE	PVDF	PES	Cellulose Nitrate
Trichloroethane	C	C	C	N	L
Trichloroethylene	C	C	C	N	L
<b>Ketones</b>					
Acetone	C	C	N	N	N
Cyclohexanone	C	C	N	N	C
Isopropylacetone	C	C	N	N	N
Methyl Ethyl Ketone	C	C	N	N	–
Methyl Isobutyl Ketone (MIBK)	C	C	N	N	–
<b>Esters</b>					
2-Ethoxyethyl Acetate	L	L	L	N	–
Amyl Acetate	C	C	C	N	N
Benzyl Benzoate	C	C	–	N	–
Butyl Acetate	C	C	C	N	N
Ethyl Acetate	C	C	C	N	N
Isopropyl Myristate	C	C	–	N	–
Methyl Acetate	L	C	L	N	–
Propyl Acetate	L	N	C	N	–
Propylene Glycol Acetate	L	C	–	N	–
Methyl Cellosolve Acetate	C	C	C	N	–
Tricresyl Phosphate	–	C	–	N	–
<b>Oxides — Ethers</b>					
Acetonitrile (Methyl Cyanide)	C	C	C	N	N
Aniline	L	C	C	N	–
Diethyl Acetamide	C	C	C	–	–
Dimethyl Formamide	C	C	N	N	N
Dimethyl Sulfoxide (DMSO)	C	C	C	N	N
Dioxane	C	C	L	N	–
Ethyl Ether	C	C	C	C	–
Isopropyl Ether	C	C	N	C	–
Pyridine	C	C	L	N	–
<b>Solvents with Nitrogen</b>					
Tetrahydrofuran	C	C	L	N	–
Triethanolamine	C	C	C	–	–
<b>Miscellaneous</b>					
Formaldehyde Solution, 30%	C	C	C	C	–
Hydrogen Peroxide, 30%	N	C	C	C	–
Phenol, Aqueous, 10%	N	C	L	N	–
Silicone Oil & Mineral Oil	C	C	C	C	–

C = Compatible  
 N = Not compatible  
 L = Limited Compatibility  
 – = No data available

The information in this chart is to be used ONLY as a guide in selecting membrane for appropriate chemical compatibility. ALWAYS test under the specific conditions of your application before use.

# BOROSIL®

enabling the future of science

## BOROSIL LIMITED

1101, Crescenzo, G-Block, Opp. MCA Club,  
Bandra Kurla Complex, Bandra (E), Mumbai - 400 051. India  
T : +91 22 6740 6300 F : +91 22 6740 6514  
E : borosil@borosil.com W : www.borosil.com

Write to us for export enquiries at [eximbor@borosil.com](mailto:eximbor@borosil.com)

### MUMBAI

T : 022 6740 6400  
F : 022 6740 6444  
E : mumbaisales@borosil.com

### DELHI

T : 011 41505893  
E : delhi@borosil.com

### CHENNAI

T : 044 2822 6012 / 13  
F : 044 2822 6014  
E : chennai@borosil.com

### KOLKATA

T : 033 2229 9166  
F : 033 2226 2045  
E : calcutta@borosil.com

### AHMEDABAD

T : 079 4009 3175  
E : mumbaisales@borosil.com

Laboratory Glassware :  
<https://www.borosillab.com>

Laboratory Equipment :  
<https://labquest.co>

Filter Papers :  
<https://borosilfilters.com>