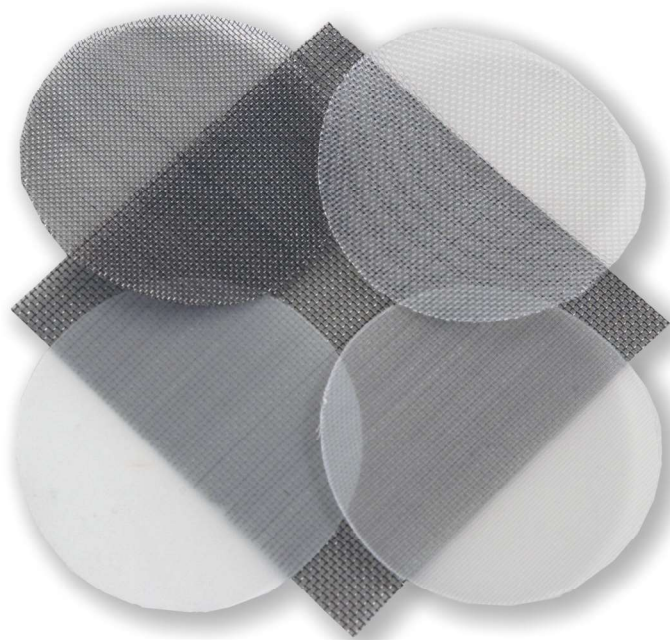


Mesh® Woven Filters



Spectrum provides a broad range of monofilament woven mesh screens, characterized by precise mesh openings, percent open area and mesh thickness.

Mesh Opening is the distance between the strands and is expressed in microns.

Open Area represents the proportion of total area that is open space and is expressed as a percentage.

Mesh Thickness is the thickness of the woven screen (approximately two strands) and is expressed in microns.

U.S. Standard Sieve Size Reference Table

The U.S. Bureau of Standard and American Society of Testing Materials adopted the following "Sieve Size" specification as a means to standardize filtration mesh screens. The sieve number is an arbitrary designation and does not refer to a mesh count/inch.

Mesh Size	Mesh Opening (µm)	Mesh Size	Mesh Opening (µm)
5	4000	45	354
6	3360	50	297
7	2830	60	250
8	2380	70	210
10	2000	80	177
12	1680	100	149
14	1410	120	125
16	1190	140	105
18	1000	170	88
20	841	200	74
25	707	230	63
30	545	270	53
35	500	325	44
40	420	400	37

Spectra/Mesh® Application Selection Guide

There are five polymer types to select from depending on the macrofiltration application; Nylon (N), Polyester (P), Polypropylene (PP), PEEK (PK) and Stainless Steel (SS).

Macrofiltration Application	Spectra/Mesh® Type				
	N	P	PP	PK	SS
ENVIRONMENTAL					
Hazardous Waste	✓			✓	
Drinking Water Purification	✓	✓	✓	✓	
Acid Rain Measurement	✓			✓	✓
Suspended Soils	✓	✓	✓	✓	✓
Rock Grading			✓		✓
Air / Asbestos	✓	✓			✓
Coal Dust Analysis	✓	✓			✓
Oceanography	✓				✓
Trace Element Analysis	✓	✓	✓	✓	
Fertilizers	✓	✓	✓	✓	✓
PHARMACEUTICAL					
Aqueous Serum Clarification	✓	✓	✓		
Organic Serum Clarification		✓	✓	✓	
Immunological & Diagnostic Assays	✓	✓	✓		
Solution Manufacturing	✓	✓	✓	✓	✓
CHEMICAL					
Bacteria Removal	✓	✓	✓	✓	✓
Particulate Removal	✓	✓	✓	✓	✓
Solvent Filtration	✓	✓	✓		
Gas Filtration			✓	✓	✓
Fuel Testing			✓	✓	✓
RESEARCH					
Cellular Separations	✓	✓	✓	✓	
Tissue Culture	✓	✓	✓	✓	
Colony Transfer	✓	✓			
Plaque Lifts	✓	✓	✓	✓	
Immunology	✓	✓			
HPLC Sample Preparation	✓	✓			
Cellular & Bacterial Analysis		✓			
Protein & Virus Purification	✓	✓		✓	
Trace Element Analysis		✓		✓	
RNA & DNA Hybridization	✓		✓		
Electron Microscopy	✓	✓	✓	✓	✓
INDUSTRY					
Photoresist / Semi-conductor	✓		✓		
Electronic Fluid Filtration	✓		✓	✓	✓
Air Venting		✓	✓		✓
Tank Venting		✓	✓	✓	✓
Steam Sterilization				✓	✓
Business Machines & Appliances	✓	✓			✓
Automotive Equipment	✓	✓			✓
Pulp & Paper Production	✓	✓	✓	✓	✓
Food Processing	✓	✓			
Cosmetic Processing	✓	✓	✓		
Wine & Beer Clarification/Sterilization	✓				

Product Specifications & Properties

Material Type	Nylon	Polyester	Polypropylene	PEEK	Stainless Steel
Mesh Openings:	5 - 1000 µm	5 - 300 µm	105 - 1000 µm	35 - 800 µm	30 - 914 µm
Water Affinity:	hydrophilic	mildly hydrophobic	hydrophobic	very hydrophobic	hydrophilic
Strength/Durability:	high	high	high (wet)	medium	very high
Adsorption:	high	low	low (inert)	very low (inert)	high
Best Resistance:	corrosives	alkalis / organics	acids / alkalis / organics	nearly all	corrosives
pH Resistance:	pH 3 - 10	pH 3 - 13	pH 2 - 14	pH 1 - 14	pH 4 - 12
Thermal Stability:	up to 180°C	up to 140°C	up to 130°C	up to 250°C	up to 180°C
Sterilization:	irradiation	autoclavable	autoclavable	autoclavable	autoclavable / irradiation

Ordering Information: Spectra/Mesh® Woven Filters

	Mesh			Disc Diameter				Sheet
	Opening (µm)	Open Area (%)	Thickness (µm)	25 mm	47 mm	55 mm	90 mm	30 x 30 cm
Nylon	5	2	100	148100	148130	145816	145925	146519
	8	1	75	148101	148131	145815	145924	146518
	10	2	45	148102	148132	145813	145922	146514
	20	14	55	148104	148134	145811	145920	146510
	25	16	55	148105	148135	145810	145919	146508
	30	21	64	148106	148136	145809	145918	146506
	41	33	60	148108	148138	145807	145916	146502
	53	36	60	148110	148140	145805	145914	146498
	60	45	55	148111	148141	145803	145912	146494
	70	36	70	148113	148143	145801	145910	146490
	100	47	78	148115	148145	145799	145908	146488
	200	55	125	148116	148146	145798	145907	146487
	300	50	200	148117	148147	145797	145906	146486
	600	51	445	-	-	-	-	146483
	710	45	350	-	-	-	-	146482
1000	58	1350	-	-	-	-	146479	
Polyester	5	2	65	148240	148270	145828	145937	146521
	10	2	55	148242	148272	145831	145939	146524
	15	8	55	148243	148273	145832	145948	146525
	21	15	70	148244	148274	145833	145940	146526
	43	29	70	148248	148278	145837	145942	146530
	60	29	87	148250	148280	145840	145954	146533
	74	36	90	148252	148282	145842	145956	146535
	80	39	90	148253	148283	145843	145945	146536
300	44	258	148257	148287	148300	145962	148390	
Polypropylene	105	26	212	148496	148516	145775	145884	146436
	149	34	193	148498	148518	145773	145882	146432
	210	34	308	148500	148520	145771	145880	146428
	250	31	430	148501	148521	145770	145879	146426
	297	36	420	148502	148522	145769	145878	146424
	350	34	525	148503	148523	145767	145876	146422
	500	39	610	148505	148525	145765	145874	146418
	840	46	725	148508	148528	145762	145871	146412
1000	45	1020	148509	148529	145761	145870	146410	
PEEK	35	22	71	148800	148801	148802	148803	146802
	115 x 145	56	50	148840	148841	148842	148843	146804
	220	56	128	148860	148861	148862	148863	146806
	300	36	370	148880	148881	148882	148883	146808
	800	45	750	148940	148941	148942	148943	146814
			Qty/Pkg:	10	10	10	10	3
Stainless Steel	30	30	50	-	-	145827	145936	148985
	51	42	56	-	-	145826	145935	148986
	104	45.2	102	-	-	145825	145934	146439
	213	49.8	178	-	-	145823	145932	146438
	500	57	330	-	-	145817	145926	148987
	914	52	712	-	-	148931	148934	148989
			Qty/Pkg:			5	5	2