appendices

Cross Reference Pages • 250

BioScience Products 250

Appendix A: Filtration Simplified • 254

Basic Filtration Concepts and Terms 254

Filter Types and Filter Holders 256

Appendix B: Product Selection • 260

Product Selection Chart 260

Alphabetical Index • 262

Index by Product Name 262

Numerical Index • 265

Index by Catalog Product Number 265

Trademarks • 275

Whatman and Affiliated Trademarks 275

Cross Reference Pages 250-253

Appendix A: Filtration Simplified 254-259

Appendix B: Product Selection 260-261

Alphabetical Index 262-264

Numerical Index 265-274

Trademarks 275

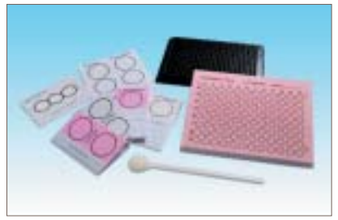
BioScience Products

To find out more about the BioScience products on the next few pages, as well as many others, please refer to our new Whatman BioScience Product Guide - # 12006B

Nucleic Acid and Protein Sample Preparation

FTA® Card

Collect, archive, transport and purify nucleic acids, all at room temperature. Whatman FTA provides a remarkably easy way to collect and isolate nucleic acid samples for analysis. Simply apply virtually any type of biological sample to the FTA matrix and the nucleic acids are instantly captured and stabilized. Pathogens are inactivated, making samples safe to handle and ship. Store samples, including clones, at room temperature and analyze whenever you're ready.



FTA

FTA® Elute

The FTA Elute matrix is chemically treated with proprietary reagents that lyse cells upon contact causing the release of nucleic acids. DNA is recovered from the FTA Elute matrix through a simplified elution process using water and heat. Captured nucleic acid is easily released for multiple downstream applications in less than 30 minutes. FTA Elute Cards are stored at room temperature before and after sample application, reducing the need for laboratory freezers. FTA Elute rapidly inactivates organisms including blood-borne pathogens and eliminates the risk of contamination for the individuals handling the sample.

FTA Elute

CloneSaver® Card

FTA Technology in a 96 Well format for high throughput applications. Designed for the collection, storage and purification of plasmid and BAC DNA from bacterial clones. DNA is stable at room temperature for at least 5 years (real-time data).

CloneSaver Card

Elutrap®

The Elutrap System is designed to isolate nucleic acids and proteins from agarose or polyacrylamide gel slices by electroelution. Samples are concentrated in as little as 200 µl with excellent recoveries and without sample pretreatment or special buffers. Samples pass through a membrane which restricts the gel slice and are trapped by a molecular weight cutoff membrane for retention. The Elutrap System works with most horizontal gel electrophoresis chambers.

Elutrap

Multiwell Plates

Protein Precipitation UNIFILTER® FF

Fast, easy and automatable protein precipitation. A fast, effective protein removal method for plasma and serum for high-throughput labs measuring drugs and metabolites. This high-quality filter plate replaces the lengthy centrifugation process with a vacuum filtration method, making sample preparation three times faster. It allows you to automate acetonitrile precipitation and speed up your research.

Protein Precipitation UNIFILTER FF

Protein Kinase Assay UNIFILTER®

Kinase assay in a 96 Well format. The Whatman Protein Kinase Assay filter plate incorporates a P81 filter in each well. P81 is a cation exchanger that binds peptides but does not bind unincorporated ATP, resulting in low non-specific background noise and high sensitivity in kinase assay.

Protein Kinase Assay UNIFILTER

ELISA UNIFILTER®

Better kinetics and simpler washing for ELISA. The Whatman ELISA plate allows researchers to utilize the excellent protein binding characteristics of nitrocellulose ~49 - µg IgG per well in a 96 Well format. Solutions are easily vacuumed to waste using a vacuum manifold.

ELISA UNIFILTER

Phase Separation UNIFILTER®

Quick separation of halogenated solvents from an aqueous phase in a 96 Well format with no carryover and no close manual contact. Whatman 1PS media sealed into each well is a silicone treated media which remains impervious to aqueous solutions but organic solvents can go through.

Phase Separation UNIFILTER

Multi-Chem™ Microplates

Chemically resistant and low binding material microplate. Ideal for aggressive organic solvents such as DMF, TFA, THF, acetonitrile, chloroform and methylene chloride. Non-binding properties also make them ideal for storage of biological materials.

UNIPLATE™ 'V' Bottom Microplates

'V' bottom ensures maximum sample recovery. The 96 and 384 Well format UNIPLATE with 'V' bottom are ideal for applications with small sample volumes. The vertical sides of the well, combined with the 'V' design at the base of each well, ensure that all the material runs down the side walls and is channeled into the well base.

Capmats
Flexible capmats individually seal the top of each well. Capmats may be used on either filter or collection microplates.

BugStopper® Microplate Capmat
Sterile venting closures for 24 Well microplate cultures. 24 cultures (5-7 mL/sample) can be grown in a microplate, allowing easier handling than 24 test tubes. The autoclavable venting capmats significantly reduce evaporation rate and are perfect for extended growth of slow growing bacteria and fungi.

Multi-Chem Microplates

BugStopper Microplate Capmat

Protein Microarrays

FAST Quant®
FAST Quant kits are designed for high-throughput multiplex cytokine quantitation analyses. Each kit contains 64 arrays on FAST Slide surfaces with 8-10 monoclonal antibodies against a wide variety of cytokines per array, in triplicate. The most common cytokines for both human and mouse are represented in the FAST Quant system. The MicroSpot ELISA reaction is concentration dependent, making FAST Quant the fastest and most sensitive method of quantitating cytokines in a multiplex format.

Serum Biomarker Chip
The Serum Biomarker Chip allows proteomics researchers to pattern the molecular signature of human serum. The Serum Biomarker Chip is a single capture antibody array built on the FAST Slide dual pad platform. Each slide has an identical arrays of antibodies printed in triplicate. Two color fluorescent detection permits the comparison of the molecular signature of 120 human serum proteins between matched serum samples.

Protein Array Services
Several services are available for protein array researchers. Based on the FAST Quant System, the Quantitative Cytokine Array Processing & Data Analysis service will construct custom arrays from our antibody menu of 40 human and 19 murine specificities. Using the Serum Biomarker Chip service, researchers can send matched serum samples for analysis of 120 human serum proteins. Contract printing services are available to those researchers who wish to design their own protein array experiments. Whatman also offers a FAST Slide Scanning and Data Analysis service for smaller laboratories who do not wish to invest in instrumentation but want the value protein array experiments can bring them. Scientists at Whatman can also discuss and design entire protein array experiments from start to finish for those researchers just beginning protein array work.

FAST Quant

Serum Biomarker Chip

Protein Array Services

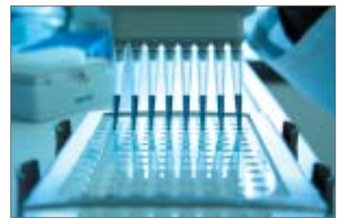
Blotting Products

Protran®
Protran nitrocellulose membranes are the most frequently specified transfer media in the world for a wide range of applications. Protran is made with 100% pure nitrocellulose for high binding capacities and low background. Protran is compatible with a variety of detection methods, including isotopic, chemiluminescent (luminol-based), colorimetric and fluorescent. Protran is wetted with an aqueous buffer which is ideal for proteins in aqueous environments. Protran is available in pore sizes of 0.1 µm, 0.2 µm and 0.45 µm for a wide variety of molecules.

Minifold® I
The Minifold System is for dot-, spot- or slot-blot arrays. The dot-, spot- or slot-blot plates are interchangeable on the vacuum manifold base, making the Minifold I System versatile for DNA or protein arrays. The spot- and dot-blot are in a 96-well format and the slot-blot has a 48-well format ideal for densitometric scanning. The Minifold I System is used with Protran, Optitran or Nytran membranes for blotting applications.

TurboBlotter™
The TurboBlotter is a rapid downward blotting device for the high-resolution transfer of DNA and RNA from agarose gels to blotting membranes. The traditional transfer setup has been turned upside down; no heavy weights are required for transfer. Alkaline DNA transfers can be performed in as little as 1 hour while neutral (SSC) transfers of DNA or RNA take only 3 hours. Complete kits have components for 5 transfers and replacement transfer packs are available.

Protran



Minifold I

TurboBlotter

Filtration Simplified

Basic Filtration Concepts and Terms

Selecting a filter with the appropriate properties can help you achieve accurate results and reach discovery faster. But with so many types of filters to choose from, how can you be sure you're making the right choice? Whatman has assembled this compilation of basic filtration concepts and terms to clarify the various options available to you and speed the process of selection.

Airborne Particle Retention

Retention mechanisms for removing particulates from air or gas enable much higher efficiencies to be realized than those applicable to liquids. Efficiencies for air filtration are normally expressed as percent penetration or retention for a stated airborne particle size. In the United States, the Dioctyl Phthalate (DOP) test is commonly used wherein the filter is challenged with an aerosol containing 0.3 µm particles.

Ash Content

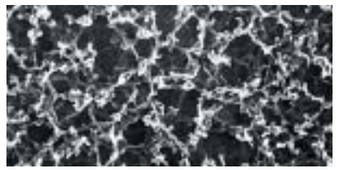
Determined by ignition of the cellulose filter at 900°C in air. Ash content is essential in gravimetric applications and also a useful measure of the level of general purity.

Chemical Compatibility

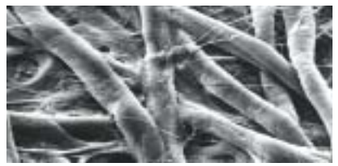
It is very important to ensure that the pore structure of the filter media will not be impaired by exposure to certain chemicals. In addition, exposure to these chemicals should not cause the filter to shed fibers or particles, or add extractibles. Length of time exposure, temperature, concentration and applied pressure can all effect compatibility. Whatman has provided chemical compatibility charts to aid your membrane selection (see page 260).

Depth Filters

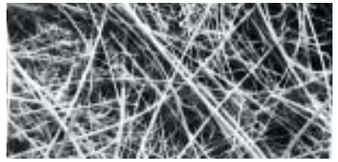
Depth filters are usually characterized as those which retain particles on the surface and within the filter matrix. All conventional fibrous filters (whether manufactured from cellulose, borosilicate glass microfiber or other fibrous material) are depth filters and are normally characterized by exhibiting good loading capacity.



Membrane filters allow the efficient retention of submicron particulates and organisms.



Whatman cellulose filter papers exhibit particle retention levels down to 2.5 µm.



Glass microfiber filters are manufactured by Whatman from 100% borosilicate glass.

Multigrade GMF 150 combines two filters in one for fast, effective multilayered filtration.

Herzberg Method

Whatman quantifies liquid flow rate for its range of filters by using a Herzberg flow rate test. Prefiltered deaerated water is applied to the test filter (effective area 10 cm^2) at a constant hydrostatic head (10 cm). The rate of the flow is measured in seconds per 100 mL. Flow rate can also be measured by the modified ASTM method which uses a quadrant folded filter held in a wire loop. It is not considered to be as reliable or consistent as the Herzberg test.

Hydrophilic

Because hydrophilic filters possess an affinity for water and can be wetted with virtually any liquid, they are typically used for aqueous solutions.

Hydrophobic

These types of filters repel water, and are thus best suited for venting or gas filtration applications.

Liquid Flow Rate

Under practical filtration conditions, the liquid flow rate will depend on a number of factors, many of which will be specific to the solid/liquid being filtered. In order to compare filter performances, a standardized set of conditions is required which will characterize liquid flow rate for a given filter without the complicating secondary effects derived from the presence of particulates. Liquid flow rate is tested with prefiltered, deaerated water using a flat filter subjected to a constant hydrostatic head. Test methods based on quadrant folded filters are considered unreliable.

Loading Capacity

This relates to the ability of a filter to load particulates into the fibrous matrix while maintaining a practical filtration speed and a workable pressure differential across the filter. In general, glass microfiber filters have a high loading capacity when compared with cellulose filters of the same retention rating and thickness. Membranes are inherently low in loading capacity. 'Choking life' is a measure of loading capacity.

Particle Retention (Liquid)

In a filtration process, the particle retention efficiency of a depth-type filter is expressed in terms of the particle size (in µm) at which a retention level of 98% of the total number of particles initially challenging the filter is obtained. It is customary to quote the retention levels at 98% efficiency to allow for secondary filtration effects. All Whatman depth filter grades have a published nominal retention rating determined on this basis.

Pore Size

The pore size, usually stated in micrometers (µm), of Whatman filter media is defined by the diameter of particles retained by the filter matrix. Pore size ratings, which can be either nominal or absolute, refer to the size of organisms or particles retained by the filter media.

Prefilters

Prefilters are traditionally depth filters placed upstream from a membrane filter to significantly reduce the particulate loading in the system and thereby allow the membrane to operate efficiently at a light particulate loading.

Screen or Surface Filters

Membrane filters are generally described as screen filters because particles are almost entirely trapped on the filter surface. The narrow effective pore size distribution of Whatman membrane filters is one of their major features.

Filter Types and Filter Holders

Filter Papers

Whatman qualitative and quantitative filter papers are, with few exceptions, manufactured from high-quality cotton linters which have been treated to achieve a minimum alpha cellulose content of 98%. These cellulose filter papers are used for general filtration and exhibit particle retention levels down to 2.5 µm. There is a wide choice of retention/flow rate combinations to match numerous laboratory applications. The different groups of filter paper types offer increasing degrees of purity, hardness and chemical resistance. Whatman quantitative filter papers have extremely high purity for analytical and gravimetric work.

Glass Microfiber Filters (GMF)

The unique properties of borosilicate glass microfibers enable Whatman to manufacture filters with retention levels extended into the submicron range. These depth filters combine fast flow rate with high loading capacity and retention of very fine particulates. Due to the high void volume exhibited by glass microfiber filters, the choking life is considerably extended beyond the life of a cellulose filter of similar retention. Whatman glass microfiber filters are manufactured from 100% borosilicate glass and most are completely binder-free. Binder-free glass microfiber filters will withstand temperatures up to 550°C and can therefore be used in gravimetric analysis where ignition is involved.

Membrane Filters

Unlike cellulose and glass microfiber depth filters, membrane filters are conventionally classified as surface filters because the filter matrix acts as a screen and retains particulates almost entirely on the smooth membrane surface. The retention levels for these filters extend down to 0.02 µm and allow the efficient retention of sub-micron particulates and organisms. Water microbiology and air pollution monitoring are major applications of membranes.

Prefilters

The life of a membrane filter can be extended many times by placing a prefilter upstream of the membrane. The total particulate load challenging the membrane is considerably reduced thus allowing the membrane to operate efficiently.

Standard Circle Funnel Volumes

The maximum practical volume of the most popular circle sizes (quadrant folded) is given in the following chart. Membrane and glass microfiber filters are used flat.

Diameter (cm)	Volume (mL)
9	15
11	20
12.5	35
15	75
18.5	135
24	300

Types of Filter Holders

A filter matrix requires a suitable support structure to enable it to be used for the filtration of liquids or gases. One of the simplest forms of holder is the conical glass filter funnel into which a quadrant folded or fluted filter paper is placed (1). Some applications require additional motivating force for the solid particulate/liquid separation to occur (i.e., vacuum assisted filtration). This type of filtration can be carried out in a one-piece Büchner style funnel (2) where the filter is used flat on a perforated base sealed into the funnel. Due to the difficulties encountered in cleaning this type of funnel, the demountable 3-piece funnel was developed (3). The Whatman 3-Piece Filter Funnel is fully demountable and enables the filter paper to be securely clamped between the support plate and filter reservoir flange. Membrane holders (4) incorporate either sealed-in sintered glass or removable stainless steel mesh supports for the membrane. Syringe and in-line filters are also available. Large diameter membranes are typically used in pressure holders.


1


2


3


4

Selecting the Right Filter

The selection of a laboratory filter depends on the conditions and objectives of the experiment or analytical procedure.

The three most important characteristics of any laboratory filter are:

- Particle retention efficiency
- Fluid flow rate through the filter
- Loading capacity

In addition, according to the particular application, other important characteristics may require examination. For instance, wet strength, chemical resistance, purity and ash level may assume equal importance under certain circumstances.

Standard 58° or 60° Funnels

Glass/Polyethylene

Funnel Diameter (mm)	Filter Paper Size (cm)
35	5.5
45	7.0
55	9.0
65	11.0
75	12.5
90	15.0
100	18.5
160	24.0
180	32.0
220	40.0
260	50.0

Büchner Funnel Filter Selection

Diameter (mm)	Perforated Area (mm)	Filter Paper Size (mm)
43	32	42.5
63	42	55
83	60	75
100	77	90
114	95	110
126	105	125
151	135	150
186	160	185
253	213	240

Typical Particle Sizes

Gelatinous Precipitates	µm
Metal Hydroxides	25–40
Precipitated Silica	25–40
Crystalline Precipitates	
Ammonium Phosphomolybdate	20
Calcium Oxatate	15
Lead Sulfate	10
Barium Sulfate (hot ppt.)	8
Barium Sulfate (cold ppt.)	3
Blood Cells	
Platelets	2–3
Erythrocytes (average)	7.0
Polymorphs	8–12
Small Lymphocytes	7–10
Large Lymphocytes	12–15
Monocytes	16–22
Bacteria*	
Cocci	0.5
Bacilli	1.0 x (1.0–1.0)
Serratia marcescens	0.5 x (0.5–1.0)
Pneumococcus	1.0
Bacillus tuberculosis	0.3 x (2.5–3.5)
Amoeba	12-30
E. coli	0.5 x (1.0–3.0)
Smallest Bacteria	0.22
Other Microorganisms, etc.	
Yeast Cells	2.0–8.0
Tobacco Smoke	0.5
Colloids	0.06–0.30
Rye Grass Pollen	34
Ragweed Pollen	20
Puffball Spores	3.3

* Where bacteria are rod-shaped, range of lengths is given in brackets

Product Selection

Compatibility of Membranes

Solvent	ANP	CA	CN	PC	PE	GMF	NYL	PP	dpPP	PSU	PES	PTFE	PVDF
Acetic Acid, 5%	R	LR	R	R		R	R	R	R	R	R	R	R
Acetic Acid, Glacial	R	NR	NR			R	LR	R	R	R	R	R	R
Acetone	R	NR	NR	NR	R	R	R	R	R	NR	NR	R	NR
Acetonitrile	R	NR	NR			R	R	R	R	NR	R	R	R
Ammonia, 6N	NR	+	NR	NR	LR	LR	R	R	R	R	R	R	LR
Amyl Acetate	LR	NR	NR	R	R	R	R	R	R	NR	LR	R	LR
Amyl Alcohol	R	R	R			R	R	R	R	R	NR	R	R
Benzene*	R	R	R	LR	R	R	LR	LR	LR	NR	R	R	R
Benzyl Alcohol*	R	LR	LR	LR	R	R	LR	R	R	NR	NR	R	R
Boric Acid	R	R	R	R	R	R	LR	R	R	R	+	R	R
Butyl Alcohol	R	R	R	R	R	R	R	R	R	R	R	R	R
Butyl Chloride*		+				R	NR	NR	NR	+	+	R	R
Carbon Tetrachloride*	R	NR	R	LR	R	R	LR	LR	LR	NR	R	R	R
Chloroform*	R	NR	R	NR	R	R	NR	LR	LR	NR	NR	R	R
Cyclohexanone	R	NR	NR			R	NR	R	R	NR	NR	R	R
Chlorobenzene	R	+	R			R	+	+	+	+	NR	R	R
Citric Acid		+	+			R	LR	+	+	+	R	R	R
Cresol		NR	R			R	NR	R	R	NR	NR	R	NR
Cyclohexane	R	R	R	R	R	R	R	R	R	R	R	R	R
Diethyl Acetamide		R	NR			R	R	R	R	NR	+	R	NR
Dimethyl Formamide	LR	NR	NR			R	R	R	R	NR	NR	R	NR
Dioxane	R	NR	NR	NR	R	R	R	R	R	NR	LR	R	LR
DMSO	LR	NR	NR	NR	R	R	R	R	R	NR	NR	R	LR
Ethanol	R	R	NR	R	R	R	R	R	R	R	R	R	R
Ethers	R	LR	LR	R	R	R	R	R	R	R	R	R	LR
Ethyl Acetate	R	NR	NR	LR	R	R	R	R	R	NR	NR	R	LR
Ethylene Glycol	R	LR	LR	R	R	R	R	R	R	R	R	R	R
Formaldahyde	LR	LR	R	R	R	R	R	R	R	R	R	R	R
Freon TF	R	R	R	R	R	R	R	R	R	R	R	R	R
Formic Acid		LR	LR			R	NR	R	R	LR	R	R	R
Hydrochloric Acid, Conc	NR	NR	NR	R	NR	R	NR	LR	LR	R	R	R	R
Hydroflouric Acid		NR	NR			NR	NR	LR	LR	+	+	R	R
Hexane	R	R	R	R	R	R	R	R	R	R	R	R	R
Isobutyl Alcohol	R	R	LR	R	R	R	R	R	R	R	+	R	R
Isopropyl Alcohol	R	R	LR			R	R	R	R	NR	+	R	R
Methanol	R	R	NR	R	R	R	R	R	R	R	R	R	R
Methyl Ethyl Ketone	R	LR	NR	LR	R	R	R	R	R	NR	NR	R	R

contd >

Solvent	ANP	CA	CN	PC	PE	GMF	NYL	PP	dpPP	PSU	PES	PTFE	PVDF
Methylene Chloride*	R	NR	LR			R	NR	LR	LR	NR	NR	R	R
Nitric Acid, Conc		NR	NR	R	NR	R	NR	NR	NR	NR	NR	R	NR
Niric Acid, GN		LR	LR			R	NR	LR	LR	LR	LR	R	LR
Nitrobenzene*	LR	NR	NR	NR	R	R	LR	R	R	LR	NR	R	R
Pentane	R	R	R	R	R	R	R	R	LR	R	R	R	R
Perchloro Ethylene	R	R	R			R	R	R	LR	NR	NR	R	R
Pyridine	R	NR	NR	NR	R	R	LR	R	R	NR	NR	R	R
Phenol 0.5%	LR	LR	R			R	R	R	R	NR	NR	R	R
Sodium Hydroxide, 6N	NR	NR	NR	NR	NR	NR	LR	R	R	R	R	R	NR
Sulfuric Acid, Conc	NR	NR	NR	NR	NR	R	NR	NR	R	NR	NR	R	NR
Tetrahydrofuran	R	NR	NR			R	R	LR	LR	NR	NR	R	R
Toluene*	R	LR	R	LR	R	R	LR	LR	LR	NR	NR	R	R
Trichloroethane*	R	NR	LR	NR	R	R	LR	R	R	NR	R	R	R
Trichloroethylene*	R	+	R			R	NR	R	R	NR	NR	R	R
Water	R	R	R	NR	R	R	R	R	R	R	R	NR	R
Xylene*	R	R	R			R	LR	LR	LR	NR	LR	R	R

R = Resistant; LR = Limited Resistance; NR = Not Recommended; + = Insufficient Data; * = Short Term Resistance of Housing
The above data is to be used as a guide only. Testing prior to application is recommended.

Membrane Abbreviations:
ANP – Anopore
CA – Cellolose Acetate
CN – Cellulose Nitrate
PC – Polycarbonate
PE – Polyester
GMF – Glass Microfiber
NYL – Nylon
PP – Polypropylene
dpPP – Depth Polypropylene
PSU – Polysulfone
PES – Polyethersulfone
PTFE – Teflon
PVDF – Polyvinylidene Fluoride

Alphabetical Index

	Page
3MM Chr Cellulose Chromatography Papers	**222**
A	
Acid Treated Low Metal TCLP Filters	**24**
Advanced Ion Exchange Cellulose	**217**
Air Monitoring Membrane, PM 2.5	**46**
Air Sampling Filters/Quartz Filters	**24**
Amber Mini-UniPrep Syringeless Filter	**130**
Analytical Funnels	**158**
Anion Exhangers	**218**
Anodisc Membrane Filter	**68** 67, 69
Anopore® Inorganic Membranes	**67**
Anotop Syringe Filters	**103**
Antibiotic Assay Paper and Disks	**209** 210
Application Specific Filters	**20** 21
Application Specific HPLC Columns	**232**
Aqueous IFD and Solvent IFD	**95**
AS 300 and 600 Multiple Vacuum Filtration Apparatus	**182**
Ashless Cellulose Powder Filter Aid	**200**
Ashless Quantitative Filter Paper	**16** 5
AUTOCUP Disposable Filter Funnel	**139**
Automation, Syringe Filters	**125** 102, 123
Autovial Accessories	**128**
Autovial Stand	**128**
Autovial Syringeless Filters	**126**
B	
Benchkote and Benchkote Plus	**200**
Binder-Free Glass Microfiber Filters	**22**
Black Cyclopore Membranes	**57**
Black Nuclepore Membranes	**58**
Bottle-Top Filters	**143**
Brilliant Green Bile Broth 2%	**166**
Broths, for Microbiology	**167**
BÜCHI Extraction System B-811Extraction Thimble	**195**
Buffers	**166**
Buffer Swabs	**176**
BugStopper	**147**
Bulk Silica Media	**227** 230
Bulk Silica Media for Column Chromatography	**226**
C	
Capsule Filters	**72**
Carbon Cap	**73**

	Page
Cation Exchangers	**219**
Cell Debris Remover (CDR)	**217**
Cellulose Acetate Membranes	**33**
Cellulose Chromatography Papers	**222**
Cellulose Filters	**4**
Cellulose Membranes	**33**
Cellulose Nitrate Membranes	**34**
Cellulose Powders	**216**
CENTREX Centrifuge Filters	**93** 95
Centrifuge Filters	**90**
Chromatography	**216**
Chromatography Cellulose Media	**216**
Chromatography Paper	**222**
Clinical Papers	**209**
CryptTest Cartridge Housing AMETEK 5"	**202**
CryptTest Membrane Filter Cartridge	**201**
Cyclopore Polycarbonate and Polyester Membranes	**51**
D	
Diamond Series TLC Plates	**241** 240
Dilution Bottles	**166**
DIONEX ASE 100/300 Extraction Thimble	**195**
DIONEX ASE 200 Extraction Thimble	**195**
Dispensers Type SR pH Indicator	**206**
Dispensers Type TC pH Indicator	**206**
Disposable Filter Funnels	**137** 19, 29
E	
EPM 2000 Air Sampling Filters	**24**
EXPRESS-ION Exchangers	**218**
Extraction Products	**188**
Extraction Thimbles	**192**
Extraction Thimbles for Standard Soxhlet Apparatus	**195**
F	
Filter Funnel, Glass	**31** 62
Filter Funnel Manifold for Vacuum Filtration	**185**
Filter Holders	**64**
Filter Papers	**4** 21
Filter Papers for General Laboratory Analyses	**13**
Filter Tubes	**141**
FilterCup Disposable Filter Funnel	**140** 12, 29
FilterCup Stem with Stopper	**9** 13, 29, 141
Filtration Devices	**72**

	Page
Flexible TLC Plates	**242**
Folded (Prepleated) Qualitative Filter Paper	**14**
Forceps PZ 001	**183**
FOSS Soxtec Avanti 2050	**195**
Auto System Extraction Thimble	
G	
GD/X Syringe Filters	**108** 102
GD/XP Syringe Filters	**111** 102
General Laboratory Analyses Filter Paper	**13** 10
GERHARDT Soxtherm Automatic Extraction Thimble	**195**
Glass Fiber Filter with Binder	**28**
Glass Fiber Filter with Organic Binder	**28**
Glass Fiber Filter with Inorganic Binder	**28**
Glass Fiber Filters	**22** 26, 27
Glass Microfiber Accessories	**31**
Glass Microfiber Filters	**22**
Glass Microfiber Filters with Binder	**22**
Glass Microfiber GF Series	**26** 138, 141
Glass Microfiber Thimbles	**193** 197
GMF 150 Multigrade Membrane Prefilter	**65** 61
H	
Hardened Ashless Quantitative Filter Paper	**18** 5
Hardened Low Ash Quantitative Filter Paper	**17** 5
HEPA-VENT and HEPA-CAP	**149**
High Performance Cellulose Extraction Thimbles	**192** 194
High Performance Liquid Chromatography (HPLC)	**228**
HPLC Accessories	**238**
HPLC Certified Syringe Filters	**121**
HPLC Columns	**232**
HPLC Guard Cartridge System	**238**
HPLC Guard Cartridge System Replacements	**238**
HPLC Media	**229**
HPLC Integral Guard Cartridge Holder (for WVS)	**238**
HPLC Universal Guard Cartridge Holder	**238**
I	
IFD End Fitting Kit In-line Filters	**96**
Indicator Books	**206**
Indicator Papers	**205**
In-line Filters	**95**
Ion Exchange Papers	**225**
Ion Exchangers EXPRESS-ION	**220**
K	
Kjeldahl Weighing Boats	**212**

	Page
L	
Lens Cleaning Tissue	**205**
Liquid Media	**164**
M	
MBS I	**159**
MBS I Accessories	**161**
MBS II	**162**
MBS II Accessories	**164**
Media	**164**
Membra-Fil Mixed Ester Membranes	**39**
Membrane Accessories	**61**
Membrane Filter Accessories	**62**
Membrane Filters	**65** 154
Membrane Filtration	**154** 65
Membrane Filtration Accessories	**182** 62
Membrane Hardware/Replacement Parts	**62**
Membrane Prefilters	**61**
Membrane-Butler	**161**
Membrane-Butler E	**160** 161, 162
Membrane-Butler E Accessories	**162**
Microbiological Monitors	**156**
Microbiology	**154**
Microbiology Media/Broths	**164**
Mini-UniPrep Syringeless Filters	**129**
Mixed Cellulose Ester Membrane	**41**
N	
Neutralizing Buffer Swabs	**176**
Nuclepore Membranes	**54**
NutriDisk Membranes	**175** 154
NutriDisk Nutrient Pads	**171**
Nylon Membranes	**44**
P	
Parchment Weighing Paper	**213**
Partisil	**229** 234, 237
Partisil HPLC Media and Columns	**229** 232
PartiSphere Spherical Media HPLC Columns	**236** 230
Petri Dishes	**171**
pH Indicators and Test Papers	**205**
Phase Separator Filter Paper	**188**
Plastic Filter Holders	**64**
Polyamide Membranes	**45**
PolyCap Capsule Filters	**72**
Polycarbonate Track-Etched Membranes	**60** 51

	Page
Polydisc In-line Filters	**97**
Polyester Drain Discs	**62**
Polyethersulfone (PES) Membranes	**48**
Polypropylene Membranes	**48**
PolyVENT/SteriVENT	**145**
Polywipe Sponge	**178**
Puradisc Syringe Filters	**113** 102
Q	
Quartz Filters, QM-A	**25**
Qualitative Filter Papers	**6** 5
Qualitative Filter Papers - Folded (Prepleated Grades)	**14**
Qualitative Filter Papers - Wet Strengthened Grades	**11** 5
Quantitive Filter Papers	**16**
R	
Rapid Tests	**180**
Regenerated Cellulose Membranes	**43**
ReZist Ryringe Filters	**119** 102
Roby 25 Automation Filters	**123** 102
Roby 25 Filter Validation Kit	**124**
S	
Seed Testing Papers	**210**
Separator Paper	**188**
Shark Skin	**13** 14
Qualitative Wet Strengthened Filter Papers	
Silica Gel, 60Å Purasil	**228** 227
Six Position Compressor Accessory - Mini-UniPrep	**133**
Slit Septa Mini-UniPrep Syringeless Filter	**130**
Soil Analysis Filter Paper	**20**
Solid Phase Extraction (SPE)	**189**
Solid Phase Extraction (SPE) Disks	**190**
SPARTAN - HPLC Certified Syringe Filters	**121** 102
Specialized Test Papers	**207**
Specialty Products	**200**
Specialty Products for Protein Separations	**217**
Standard Analytical HPLC Column	**233**
Standard Cellulose Extraction Thimbles	**192** 193, 196
Standard Glass Fiber Extraction Thimbles	**192** 193, 197
Standard Methods Agar	**169**
Standard Qualitative Filter Paper	**6** 8
Strips Type CF pH Indicator	**206**
Strips Type CS pH Indicator	**206**

	Page
Sugar Industry Filter Paper	**21**
Surface Wipes Smear Tab	**20**
SwabCheck	**176**
SwabCheck Escherichia Coli	**177**
Swabs	**175**
Syringe Filters	**101**
Syringe Filters - Automation	**123**
Syringe Type Holders S/S	**63**
Syringeless Filters	**126**
T	
Teflon (PTFE) Membranes	**49**
Test Papers	**207** 209
Thin Layer Chromatography (TLC) Plates	**241**
Track-Etched Polycarbonate and Polyester Membranes	**51**
Trypticase Soy Broth	**169** 170
U	
UniPrep Syringeless Filters	**133**
UniSep C-8 Reversed Phase Media	**230**
UniSep High Performance Liquid Chromatography (HPLC) Columns	**234**
Universal Indicator Papers	**208**
V	
VACUFLO	**143**
VACU-GUARD	**135**
VACU-GUARD 150	**136**
Vacuum Filtration Equipment	**182**
Vacuum Filtration Equipment Accessories	**183**
Vacuum Pressure Pumps	**183**
Vacuum Protection Filters	**135**
Vacuum Specialty Devices	**137**
Vacuum Type Glass Holders	**62**
VectaSpin Centrifuge Filters	**90**
Venting Filters	**145**
Void Sealing (WVS) Columns	**235**
W	
Weighing Papers	**212** 213
Wet Strengthened Qualitative Filter Paper	**11**
Y	
Yeast and Mold Swab Kit	**178**
Yeast Rapid Test	**181**
Z	
ZapCap	**143**
ZC	**125**

Numerical Index

Catalog Number	Page
71503	**202**
110809	**56**
155814	**60**
10312040	**9**
10314711	**12**
10314712	**12**
10314714	**12**
10314720	**12**
10314726	**12**
10314812	**9**
10314889	**10**
10314911	**12**
10314912	**12**
10314914	**12**
10314916	**12**
10314940	**12**
10314983	**10**
10314984	**10**
10314991	**10**
10318487	**210**
10320390	**210**
10334397	**10**
10334597	**10**
10342761	**185**
10342762	**185**
10343630	**12**
10343687	**10**
10343876	**10**
10343976	**10**
10347585	**14**
10347588	**14**
10350109	**195**
10350116	**196**
10350306	**196**
10350315	**195**
10350324	**196**
10350437	**195**
10360700	**209**
10371023	**197**
10371103	**197**
10371122	**197**
10405672	**175**
10407345	**175**
10407374	**175**
10407615	**175**
10408372	**175**
10409270	**175**

Catalog Number	Page
10433406	**181**
10440220	**185**
10445902	**164**
10445998	**164**
10463530	**120**
10463608	**121**
10464103	**185**
10467032	**95**
10470310	**185**
10496112	**170**
10496126	**170**
1001-032	**8**
1001-042	**8**
1001-047	**8**
1001-055	**8**
1001-070	**8**
1001-085	**8**
1001-090	**8**
1001-110	**9**
1001-125	**9**
1001-150	**9**
1001-185	**9**
1001-240	**9**
1001-270	**9**
1001-320	**9**
1001-325	**8**
1001-329	**8**
1001-385	**9**
1001-400	**9**
1001-500	**9**
1001-6508	**8**
1001-917	**10**
1001-918	**10**
1001-931	**10**
1002-042	**8**
1002-055	**8**
1002-070	**8**
1002-090	**8**
1002-110	**9**
1002-125	**9**
1002-150	**9**
1002-185	**9**
1002-240	**9**
1002-270	**9**
1002-320	**9**
1002-385	**9**
1002-500	**9**

Catalog Number	Page
1002-917	**10**
1002-931	**10**
1003-042	**8**
1003-055	**8**
1003-070	**8**
1003-090	**8**
1003-110	**9**
1003-125	**9**
1003-150	**9**
1003-185	**9**
1003-240	**9**
1003-320	**9**
1003-323	**8**
1003-500	**9**
1003-917	**10**
1004-042	**8**
1004-047	**8**
1004-055	**8**
1004-070	**8**
1004-090	**8**
1004-110	**9**
1004-125	**9**
1004-150	**9**
1004-185	**9**
1004-240	**9**
1004-270	**9**
1004-320	**9**
1004-325	**8**
1004-400	**9**
1004-917	**10**
1005-042	**8**
1005-047	**8**
1005-055	**8**
1005-070	**8**
1005-090	**8**
1005-110	**9**
1005-125	**9**
1005-150	**9**
1005-185	**9**
1005-240	**9**
1005-320	**9**
1005-325	**8**
1006-042	**8**
1006-070	**8**
1006-090	**8**
1006-110	**9**
1006-125	**9**

1006-150	**9**
1006-185	**9**
1006-240	**9**
10300009	**19**
10300010	**19**
10300011	**19**
10300012	**19**
10300014	**19**
10300102	**19**
10300103	**19**
10300106	**19**
10300107	**19**
10300108	**19**
10300109	**19**
10300110	**19**
10300111	**19**
10300112	**19**
10300114	**19**
10300120	**19**
10300143	**19**
10300145	**19**
10300210	**19**
10300211	**19**
10300212	**19**
10300214	**19**
10301645	**21**
10301647	**21**
10310244	**15**
10310245	**15**
10310247	**15**
10310251	**15**
10310253	**15**
10310643	**21**
10310645	**21**
10310647	**21**
10310809	**22**
10311347	**15**
10311351	**15**
10311387	**10**
10311610	**9**
10311611	**9**
10311612	**9**
10311643	**15**
10311644	**15**
10311645	**15**
10311647	**15**
10311651	**15**

Catalog Number	Page
10311652	**15**
10311653	**15**
10311687	**10**
10311804	**9**
10311807	**9**
10311808	**9** 212
10311809	**9** 212
10311810	**9**
10311811	**9**
10311812	**9**
10311814	**9**
10311820	**9**
10311822	**9**
10311841	**15**
10311842	**15**
10311843	**15**
10311844	**15**
10311845	**15**
10311847	**15**
10311851	**15**
10311852	**15**
10311853	**15**
10311854	**15**
10311856	**15**
10311862	**9**
10311887	**10**
10311897	**10**
10312209	**9** 212
10312244	**15**
10312247	**15**
10312251	**15**
10312256	**15**
10312287	**10**
10312609	**9**
10312611	**9**
10312612	**9**
10312614	**9**
10312620	**9**
10312642	**15**
10312644	**15**
10312645	**15**
10312647	**15**
10312651	**15**
10313032	**213**
10313947	**15**
10313951	**15**
10313953	**15**
10316114	**22**
10316116	**22**
10316316	**22**
10316320	**22**
10316619	**22**
10331421	**12**
10331451	**15**
10331456	**15**
10331459	**15**
10331487	**10**
10331653	**15**
10331687	**10**
10334365	**10**
10334383	**10**
10334385	**10**
10334387	**10**
10334885	**10**
10334887	**10**
10334985	**10**
10334987	**10**
10341420	**9**
10342577	**212**
10342580	**212**
10342583	**212**
10342710	**212**
10342766	**212**
10342810	**12**
10342860	**12**
10342862	**12**
10343287	**10**
10344672	**212**
10344676	**212**
10345572	**212**
10345576	**212**
10347510	**13**
10347513	**13**
10347530	**13**
10347576	**13**
10347577	**13**
10347585	**14**
10347670	**213**
10347671	**213**
10347672	**213**
10347673	**213**
10347890	**213**
10347893	**213**
10348903	**9**
10350106	**195**
10350108	**195**
10350211	**195** 196
10350215	**196**
10350216	**196**
10350217	**196**
10350219	**195** 196
10350220	**196**
10350223	**196**
10350224	**196**
10350225	**196**
10350226	**196**
10350227	**196**
10350234	**196**
10350235	**196**
10350236	**196**
10350238	**196**
10350240	**195** 196
10350241	**196**
10350242	**195** 196
10350243	**196**
10350245	**196**
10350246	**196**
10350247	**196**
10350250	**195** 196
10350252	**196**
10350254	**196**
10350255	**196**
10350261	**196**
10350265	**196**
10350267	**195** 196
10350273	**196**
10350274	**196**
10350275	**196**
10350287	**196**
10350327	**195**
10350328	**195**
10360005	**209**
10360300	**209**
10360400	**209**
10362000	**209**
10362010	**209**
10362030	**209**
10370002	**30**
10370003	**30**
10370004	**30**
10370005	**30**
10370006	**30**
10370007	**30**
10370008	**30**
10370010	**30**
10370011	**30**
10370012	**30**
10370018	**30**
10370019	**30**
10370020	**30**
10370050	**30**
10370105	**30**
10370119	**30**
10370172	**30**
10370202	**30**
10370205	**30**
10370206	**30**
10370208	**30**
10370302	**30**
10370305	**30**
10370308	**30**
10370319	**30**
10370320	**30**
10371005	**197**
10371007	**197**
10371011	**197**
10371014	**197**
10371017	**197**
10371019	**197**
10371025	**197**
10371036	**197**
10371042	**197**
10371043	**197**
10371045	**197**
10371050	**197**
10371055	**197**
10371075	**197**
10371114	**197**
10372150	**30**
10382461	**225**
10382562	**225**
10382581	**225**
10400012	**38**
10400014	**38**
10400106	**38**
10400109	**38**
10400112	**38**
10400114	**38**
10400132	**38**
10400206	**37**
10400212	**37**
10400214	**37**
10400706	**42**
10400712	**42**
10400714	**42**
10400772	**42**
10400806	**42**
10400812	**42**
10400814	**42**
10400906	**42**
10400909	**42**
10400912	**42**
10400914	**42**
10400921	**42**
10400970	**42**
10401104	**38**
10401106	**38**
10401112	**38**
10401114	**38**
10401118	**38**
10401121	**38**
10401126	**38**
10401131	**38**
10401170	**38**
10401306	**38**
10401312	**38**
10401314	**38**
10401331	**38**
10401512	**42**
10401514	**42**
10401606	**42**
10401612	**42**
10401614	**42**
10401618	**42**
10401621	**42**
10401626	**42**
10401631	**42**
10401662	**42**
10401670	**42**
10401672	**42**
10401706	**41**
10401712	**41**
10401714	**41**
10401726	**41**
10401731	**41**
10401770	**41**
10401772	**41**
10402012	**38**
10402014	**38**
10403012	**34**
10403014	**34**
10403112	**34**
10403114	**34**
10404001	**34** 45
10404006	**34** 45
10404012	**34** 45
10404014	**34** 45
10404021	**34**
10404026	**34**
10404031	**34**
10404044	**34**
10404106	**45**
10404112	**34** 45
10404114	**34**
10404126	**34**
10404131	**34**
10404139	**34**
10404170	**34** 45
10404180	**34**
10404331	**34**
10405079	**38**
10406870	**156** 175
10406872	**156** 175
10407112	**155** 175
10407114	**155** 175
10407132	**155**
10407134	**155**
10407170	**155** 175
10407172	**155** 175
10407312	**156** 175
10407314	**156** 175
10407332	**156**
10407334	**156**
10407370	**156** 175
10407372	**156** 175
10407713	**155** 175
10407714	**155** 175
10407734	**155**
10408472	**175**
10409470	**156** 175
10409472	**156** 175
10409834	**175**
10409870	**175**
10409872	**175**
10410012	**43**
10410014	**43**
10410206	**43**
10410212	**43**
10410214	**43**
10410219	**43**
10410224	**43**
10410229	**43**
10410312	**43**
10410314	**43**
10410319	**43**
10411108	**50**
10411111	**50**
10411113	**50**
10411116	**50**
10411130	**50**
10411205	**50**
10411211	**50**
10411213	**50**
10411305	**50**
10411311	**50**
10411313	**50**
10411405	**50**
10411411	**50**
10411413	**50**
10421019	**30**
10421022	**30**
10421026	**30**
10421030	**30**
10421043	**30**
10421048	**30**
10421055	**30**
10421057	**30**
10421060	**30**
10433410	**181**
10434159	**174**
10434160	**174**
10434161	**174**
10434162	**174**
10434163	**174**
10434164	**174**
10434165	**174**
10434166	**174**
10434167	**174**
10434168	**174**
10434169	**174**
10434170	**174**
10440000	**185**
10440020	**185**
10443301	**144**
10443311	**144**
10443401	**144**
10443411	**144**
10443421	**144**
10443423	**144**
10443425	**144**
10443430	**144**
10443435	**144**
10444830	**185**
10444835	**185**
10444850	**185**
10445830	**185**
10445835	**185**
10445850	**185**
10445861	**161**
10445863	**161**
10445865	**161**
10445866	**161**
10445868	**161**
10445870	**161**
10445890	**161**
10445900	**164**
10445901	**164**
10445904	**164**
10445905	**171**
10445990	**164**
10445999	**164**
10462000	**118**
10462100	**118**
10462200	**118**
10462205	**118**
10462206	**118**
10462240	**118**
10462241	**118**
10462243	**118**
10462260	**118**
10462261	**118**
10462263	**118**
10462500	**119**
10462510	**119**
10462520	**119**
10462600	**118**
10462601	**118**
10462610	**118**
10462650	**119**
10462655	**119**
10462700	**118**
10462701	**118**
10462710	**118**
10463030	**122**
10463032	**122**
10463040	**122**
10463042	**122**
10463050	**122**
10463052	**122**
10463053	**122**
10463060	**122**
10463062	**122**
10463100	**122**
10463102	**122**
10463110	**122**
10463112	**122**
10463400	**101**
10463401	**101**
10463500	**120**
10463503	**120**
10463505	**120**
10463510	**120**
10463513	**120**
10463515	**120**
10463523	**120**
10463525	**120**
10463533	**120**
10463535	**120**
10463543	**120**
10463545	**120**
10463607	**120**
10463609	**121**
10463610	**121**
10463611	**121**
10463612	**121**
10463703	**120**

Indexing

Catalog Number	Page
10463713	**120**
10463800	**124**
10463801	**124**
10463802	**124**
10463803	**124**
10463804	**124**
10463805	**124**
10463806	**124**
10463807	**124**
10463808	**124**
10463809	**124**
10463812	**124**
10463813	**124**
10463814	**124**
10463815	**124**
10463898	**124**
10467012	**95**
10467013	**95**
10467015	**95**
10467017	**95**
10467021	**95**
10470300	**185**
10471700	**185**
10477100	**162**
10477110	**161** 162
10477112	**161** 162
10477113	**162**
10477600	**185**
10477601	**185**
10477602	**161** 185
10496101	**170**
10496102	**170**
10496103	**170**
10496104	**170**
10496108	**170**
10496109	**170**
10496113	**170**
10496114	**170**
10496116	**170**
10496119	**170**
10496120	**170**
10496121	**170**
10496124	**170**
10496125	**170**
10496146	**170**
10496151	**170**
10496161	**170**
10496187	**170**
10496191	**170**
10496700	**170**
10496706	**171**
10496707	**171**
10496708	**171**
10496709	**170**
10496710	**170**
10496713	**171**
10496714	**170**
10496722	**170**
10496731	**171**
10496744	**181**
10496745	**181**
10496847	**171**
10496851	**171**
10497500	**157**
10497501	**157**
10497502	**157**
10497503	**157**
10497504	**159**
10497506	**159**
10497507	**159**
10497508	**159**
10497509	**159**
10497510	**159**
10497511	**157**
10497600	**157**
10497601	**157**
10497602	**157**
10497603	**157**
10498303	**180**
10498304	**180**
10498305	**180**
10498306	**180**
10498315	**180**
10498316	**180**
10498402	**180**
10498404	**180**
10498405	**180**
10498406	**180**
10498407	**180**
10498408	**180**
10498503	**171**
10498504	**171**
10498505	**171**
10498521	**180**
10498544	**171**
10537138	**14**
10538873	**14**
10538877	**14**
1091-110	**12**
1091-125	**12**
1091-150	**12**
1091-185	**12**
1091-190	**12**
1091-240	**12**
1093-111	**12**
1093-126	**12**
110401	**55**
110405	**55**
110406	**55**
110407	**55**
110409	**55**
110410	**55**
110412	**55** 60
110413	**55** 60
110414	**55** 60
110415	**55**
110424	**59**
110601	**55**
110602	**55**
110603	**55**
110604	**55**
110605	**55**
110606	**55**
110607	**55**
110608	**55**
110609	**56**
110610	**56**
110611	**56** 60
110612	**56** 60
110613	**56** 60
110614	**56** 60
110615	**56**
110616	**56**
110637	**56**
110656	**59**
110657	**59**
110659	**59**
110807	**56**
111101	**56**
111103	**56**
111104	**56**
111105	**56**
111106	**56**
111107	**56**
111108	**56**
111109	**56**
111110	**56**
111111	**56**
111112	**56**
111113	**56**
111114	**56**
111115	**56**
111116	**56**
111130	**56**
111137	**56**
111156	**59**
111157	**59**
111164	**48**
111206	**56**
111207	**56**
111213	**56**
111216	**56**
1113-090	**12**
1113-110	**12**
1113-125	**12**
1113-150	**12**
1113-185	**12**
1113-240	**12**
1113-320	**12**
1113-500	**12**
1114-090	**12**
1114-125	**12**
1114-150	**12**
1114-185	**12**
1114-240	**12**
1114-270	**12**
1114-400	**12**
111505	**56**
111703	**56**
111705	**56**
111706	**56**
111707	**56**
111710	**56**
111711	**56**
112104	**56**
112105	**56**
112106	**57**
112107	**57**
112108	**57**
112110	**57**
112806	**57**
112807	**57**
112810	**57**
112811	**57**
113313	**57**
113502	**57**
117197	**56**
1202-125	**15**
1202-150	**15**
1202-185	**15**
1202-240	**15**
1202-270	**15**
1202-320	**15**
1202-385	**15**
1202-400	**15**
1202-500	**15**
1213-125	**15**
1213-150	**15**
1213-185	**15**
1213-240	**15**
1213-270	**15**
1213-320	**15**
1213-500	**15**
1214-125	**15**
1214-150	**15**
1214-185	**15**
1214-240	**15**
1214-320	**15**
140413	**40**
140418	**40**
140613	**40**
140618	**40**
140627	**40**
140628	**40**
141109	**40**
141112	**40**
141113	**40**
141118	**40**
141119	**40**
141127	**40**
141128	**40**
141718	**40**
142109	**40**
142118	**40**
142128	**40**
1440-042	**19**
1440-047	**19**
1440-055	**19**
1440-070	**19**
1440-090	**19**
1440-110	**19**
1440-125	**19**
1440-150	**19**
1440-185	**19**
1440-240	**19**
1440-329	**18**
1441-042	**19**
1441-047	**19**
1441-055	**19**
1441-070	**19**
1441-090	**19**
1441-110	**19**
1441-125	**19**
1441-150	**19**
1441-185	**19**
1441-240	**19**
1441-320	**19**
1441-866	**19**
1441-917	**19**
1442-042	**19**
1442-047	**19**
1442-055	**19**
1442-070	**19**
1442-090	**19**
1442-110	**19**
1442-125	**19**
1442-150	**19**
1442-185	**19**
1442-240	**19**
1442-320	**19**
1443-090	**19**
1443-110	**19**
1443-125	**19**
1443-150	**19**
1443-185	**19**
1444-070	**19**
1444-090	**19**
1444-110	**19**
1444-125	**19**
1444-150	**19**
1444-185	**19**
1450-042	**20**
1450-055	**20**
1450-070	**20**
1450-090	**20**
1450-110	**20**
1450-125	**20**
1450-150	**20**
1450-185	**20**
1450-240	**20**
1450-320	**20**
1450-993	**20**
1452-070	**20**
1452-090	**20**
1452-110	**20**
1452-125	**20**
1452-150	**20**
1452-240	**20**
1454-055	**20**
1454-070	**20**
1454-090	**20**
1454-110	**20**
1454-125	**20**
1454-150	**20**
1454-185	**20**
1454-240	**20**
1454-320	**20**
1454-500	**20**
1454-917	**20**
150445	**60**
150446	**55** 60
1540-042	**20**
1540-055	**20**
1540-070	**20**
1540-090	**20**
1540-110	**20**
1540-125	**20**
1540-150	**20**
1540-185	**20**
1540-240	**20**
1540-321	**20**
1540-324	**20**
1541-042	**20**
1541-047	**20**
1541-055	**20**
1541-070	**20**
1541-090	**20**
1541-110	**20**
1541-125	**20**
1541-150	**20**
1541-185	**20**
1541-240	**20**
1541-320	**20**
1541-400	**20**
1541-917	**20**
1542-055	**20**
1542-070	**20**
1542-090	**20**
1542-110	**20**
1542-125	**20**
1542-150	**20**
1542-185	**20**
1542-240	**20**
155845	**60**
155846	**60**
1600-001	**9** 141
1600-003	**9** 141
1600-113	**141**
1600-820	**29** 141
1600-822	**29** 141
1600-825	**29** 141
1600-900	**141** 9, 29, 13
1602-0465	**139**
1602-0475	**139**
1700-025	**200**
1703-050	**200**
170607	**56**
1810-047	**24**
1810-090	**24**
1810-110	**24**
1810-125	**24**
1810-142	**24**
1810-150	**24**
1820-021	**29**
1820-024	**29**
1820-025	**29**
1820-037	**29**
1820-042	**29**
1820-047	**29**
1820-055	**29**
1820-060	**29**
1820-070	**29**
1820-090	**29**
1820-110	**29**
1820-125	**29**
1820-150	**29**
1820-915	**29**
1821-021	**29**
1821-024	**29**
1821-025	**29** 61
1821-037	**29** 61
1821-042	**29** 61
1821-047	**29** 61
1821-055	**29**
1821-070	**29**
1821-090	**29** 61
1821-110	**29**
1821-125	**29** 61
1821-150	**29**
1821-914	**29**
1821-915	**29**
1822-021	**29**
1822-024	**29**
1822-025	**29**
1822-037	**29**
1822-042	**29**
1822-047	**29**
1822-055	**29**
1822-070	**29**
1822-090	**29**
1822-110	**29**
1822-125	**29**
1822-150	**29**
1822-914	**29**
1822-915	**29**
1823-010	**61**
1823-021	**29**
1823-024	**29**
1823-025	**29** 61
1823-035	**61**
1823-042	**29** 61
1823-047	**29** 61
1823-055	**29**
1823-070	**29**
1823-090	**29** 61
1823-110	**29**

Numerical Index

Catalog Number	Page
1823-125	**29** 61
1823-142	**61**
1823-150	**29**
1823-257	**29** 61
1823-915	**29**
1825-021	**29**
1825-024	**29**
1825-025	**29**
1825-037	**29**
1825-042	**29**
1825-047	**29**
1825-055	**29**
1825-070	**29**
1825-090	**29**
1825-110	**29**
1825-125	**29**
1825-150	**29**
1825-257	**29**
1827-021	**28**
1827-024	**28**
1827-025	**28**
1827-032	**28**
1827-035	**28**
1827-037	**28**
1827-042	**28**
1827-047	**28**
1827-055	**28**
1827-070	**28**
1827-090	**29**
1827-110	**29**
1827-125	**29**
1827-150	**29**
1827-808	**29**
1827-866	**29**
1827-889	**29**
1841-047	**61** 65
1841-090	**61** 65
1842-047	**61**
1842-090	**61**
1851-025	**25**
1851-037	**25**
1851-047	**25**
1851-055	**25**
1851-090	**25**
1851-865	**25**
1851-8866	**25**
1882-047	**25**
1882-866	**25**
1920-1441	**19** 138
1920-7001	**138**
1920-7113	**138**
1922-1820	**29** 138
1922-1822	**29** 138
1950-002	**32**
1950-004	**32**
1950-007	**32**
1950-009	**32**
1950-012	**32**
1950-017	**32**
1950-104	**32**
1950-107	**32**
1950-109	**32**
1950-114	**32**
1950-117	**32**
1950-119	**32**
1950-207	**32**
1950-209	**32**
1950-217	**32**
1960-002	**63**
1960-004	**63**
1960-009	**63**
1960-032	**63**
1960-052	**63**
1960-054	**63**
1961-054	**63**
1980-001	**64**
1980-002	**64**
2017-006	**210**
2017-013	**210**
2022S	**74**
2103	**147**
2105-841	**205**
2105-862	**205**
2105-918	**205**
2107	**147**
2108	**147**
2200-070	**189**
2200-090	**189**
2200-110	**189**
2200-125	**189**
2200-150	**189**
2200-185	**189**
2200-240	**189**
2200-270	**189**
2300-594	**201**
2300-731	**201**
2300-772	**201**
2300-916	**201**
2301-6150	**201**
2301-6160	**201**
230300	**63**
230500	**63**
230600	**63**
230800	**63**
231100	**63**
2600-100A	**208**
2600-101A	**208**
2600-102A	**208**
2600-103A	**208**
2600-104A	**208**
2600-201A	**208**
2600-202A	**208**
2600-203A	**208**
2600-204A	**208**
2600-500	**208**
2600-601	**208**
2600-602	**208**
2601T	**89**
2602-500A	**208**
2602-501A	**208**
2602S	**89**
2603T	**89**
2606T	**77**
2607NS	**77**
2608NS	**77**
2609T	**151**
2610T	**81**
2611-628	**208**
2611T	**81**
2612-990	**207**
2612T	**81**
2613-991	**207**
2613T	**82**
2614-991	**207**
2614T	**82**
2622NS	**86**
2626-990	**207**
2627-990	**207**
2628-990	**207**
2629-990	**207**
2630-990	**207**
2631-990	**207**
2700M	**90**
2700T	**90**
2702M	**90**
2702T	**90**
2703T	**90**
2706T	**77**
2707NS	**77**
2709T	**151**
2710	**82**
2710T	**82**
2711T	**82**
2712	**82**
2712M	**82**
2712T	**82**
2713	**82**
2713T	**82**
2714	**82**
2714T	**82**
2742C	**87**
2742M	**87**
2800-105	**194**
2800-166	**194**
2800-185	**194**
2800-199	**194**
2800-226	**194**
2800-228	**194**
2800-250	**194**
2800-258	**194**
2800-259	**194**
2800-266	**194**
2800-280	**194**
2800-282	**194**
2800-288	**194**
2800-300	**194**
2800-307	**194**
2800-308	**194**
2800-330	**194**
2800-331	**194**
2800-338	**194**
2800-339	**194**
2800-373	**194**
2800-412	**194** 195
2800-432	**194**
2800-608	**194**
2800-900	**194**
2800T	**90**
2801	**90**
2802	**90**
2802T	**90**
2803T	**90**
2804T	**90**
2805	**77**
2806	**77**
2806T	**77**
2807	**77**
2808	**77**
2810-166	**194**
2810-228	**194**
2810-250	**194**
2810-258	**194**
2810-266	**194**
2810-308	**194**
2810-331	**194**
2810-338	**194**
2810-339	**194**
2810-432	**194**
2810T	**82**
2811T	**82**
2812T	**82**
2813	**82**
2813T	**82**
2814	**82**
2814-199	**197**
2814-300	**197**
2814-432	**197**
2814T	**82**
2820	**84**
3001-604	**224**
3001-614	**224**
3001-633	**224**
3001-640	**224**
3001-651	**224**
3001-652	**224**
3001-653	**224**
3001-672	**224**
3001-681	**224**
3001-845	**225**
3001-861	**225**
3001-878	**225**
3001-917	**225**
3001-931	**225**
3001-964	**225**
3002-917	**225**
3003-917	**225**
3004-614	**224**
3004-651	**224**
3004-917	**225**
3017-915	**225**
3020-917	**225**
3030-153	**224**
3030-221	**224**
3030-335	**224**
3030-347	**224**
3030-392	**224**
3030-6132	**224**
3030-614	**224**
3030-6185	**224**
3030-6187	**224**
3030-6188	**224**
3030-6189	**224**
3030-6461	**224**
3030-662	**224**
3030-672	**224**
3030-675	**224**
3030-681	**224**
3030-690	**224**
3030-700	**224**
3030-704	**224**
3030-861	**224**
3030-866	**224**
3030-917	**224**
3030-931	**224**
3031-915	**225**
3454-651	**224**
3658-023	**226**
3658-323	**226**
3658-324	**226**
3658-325	**226**
3658-915	**226**
3668-915	**226**
3698-321	**226**
3698-325	**226**
3698-915	**226**
4014-050	**217**
4014-200	**217**
4020-050	**217**
4021-050	**217**
4021-500	**217**
4025-050	**217**
4025-200	**217**
4035-010	**220**
4035-050	**220**
4037-050	**220**
4037-200	**220**
4053-010	**219**
4053-025	**219**
4055-010	**219**
4056-050	**219**
4057-050	**219**
4057-200	**219**
4058-050	**219**
4058-200	**219**
4061-050	**217**
4065-050	**219**
4065-200	**219**
4071-010	**220**
4071-050	**220**
4071-200	**220**
4079-0025	**222**
4079-1025	**222**
4079-2025	**222**
4079-3025	**222**
4115-010	**231**
4116-010	**231**
4120-001	**232**
4123-010	**231**
4124-010	**231**
4125-010	**231**
4126-010	**231**
4127-010	**231**
4128-010	**231**
4129-010	**231**
4132-100	**227**
4132-301	**227**
4135-010	**231**
4138-010	**231**
4139-010	**231**
420100	**65**
420200	**65**
420400	**65**
4215-001	**233**
4216-001	**233**
4222-225	**234**
4222-227	**234**
4222-228	**234**
4222-232	**234**
4223-001	**234**
4224-001	**234**
4225-001	**234**
4226-001	**234**
4227-001	**234**
4228-001	**234**
4229-001	**234**
4230-120	**233**
4230-124	**234**
4230-125	**234**
4230-220	**233**
4232-220	**233**
4235-001	**234**
4238-001	**234**
4239-001	**234**
4250-001	**234**
4251-001	**234**
4334-225	**234**
4410-221	**243**
4410-222	**243**
4410-224	**243**
4420-221	**243**
4420-222	**243**
4500-101	**241**
4500-105	**241**
4500-303	**241**
4500-305	**241**
4522-0102	**237**
4522-0202	**237**
4550-4605	**235**
4550-4610	**235**
4550-4615	**235**
4550-4625	**235**
4601-1001	**232**
4621-0501	**237**
4621-0502	**237**
4621-0503	**237**
4621-0505	**237**
4621-0507	**237**
4621-0508	**237**
4621-1501	**237**
4621-1502	**237**
4621-1505	**237**
4621-1507	**237**
4621-1508	**237**
4631-1001	**238** 238
4631-1003	**238**
4631-1004	**238**
4641-0001	**238**
4641-0002	**238**
4641-0005	**238**
4641-0007	**238**
4641-0008	**238**
4641-1002	**238**
4681-0502	**237**
4681-0505	**237**
4681-1501	**237**
4681-1502	**237**
4681-1505	**237**
4681-1507	**237**
4681-1509	**237**
4682-1502	**237**
4682-1505	**237**
4682-1507	**237**
4745-010	**228**
4745-250	**228**
4746-010	**228**
4746-250	**228**
4776-001	**227**
4776-005	**227**
4790-010	**227**
4790-050	**227**
4790-250	**227**
4791-005	**227**
4791-010	**227**
4791-050	**227**
4791-250	**227**
4800-600	**247**
4800-620	**247**
4800-800	**247**
4800-820	**247**
4800-840	**247**
4801-425	**247**
4801-600	**247**
4801-800	**247**
4802-050	**244**
4802-400	**244**
4802-425	**244**

Numerical Index

Catalog Number	Page
4802-700	244
4803-110	247
4803-425	247
4803-600	247
4803-800	247
4804-820	247
4805-410	244
4805-420	244
4805-421	244
4805-710	244
4805-711	244
4806-410	244
4806-420	244
4806-421	244
4806-710	244
4806-711	244
4807-050	244
4807-400	244
4807-425	244
4807-700	244
4809-800	247
4809-820	247
4841-125	242
4841-820	242
4850-620	246
4850-720	246
4850-820	246
4850-830	246
4850-840	246
4851-320	246
4851-620	246
4851-720	246
4851-820	246
4851-830	246
4851-840	246
4855-620	246
4855-621	246
4855-820	246
4855-821	246
4855-840	246
4856-621	246
4856-821	246
4856-840	246
4860-320	245
4860-620	245
4860-720	245
4860-820	245
4861-110	245
4861-320	245
4861-620	245
4861-720	245
4861-820	245
4861-830	245
4861-840	245
4865-620	245
4865-621	245
4865-820	245
4865-821	245
4866-620	245
4866-621	245
4866-820	245
4866-821	245
610064	202
6700-3602	89
6700-3610	89
6700-7501	89
6700-7502	89
6700-7504	89
6700-7510	89
6701-7510	89
6702-3600	151
6702-7500	151
6702-9500	151
6703-3610	81
6703-3611	82
6703-3621	82
6703-3650	81
6703-6010	79
6703-6050	79
6703-7510	82
6703-7511	82
6703-7521	82
6703-7550	82
6703-9502	82
6703-9504	82
6703-9510	82
6704-1500	74
6704-7500	74
6704-9502	87
6705-3600	84
6705-3602	77
6705-3604	77
6705-3610	77
6705-7500	84
6705-7502	77
6705-7504	77
6705-7510	77
6706-3602	77
6706-7502	77
6707-3612	81
6708-3602	77
6708-3604	77
6708-7502	77
6708-7504	77
6709-3602	77
6709-7502	77
6709-7504	77
6710-3602	89
6710-3604	89
6710-7502	90
6710-7504	90
6711-3601	89
6711-3602	89
6711-3604	89
6711-7502	90
6711-7504	90
6711-7505	90
6713-0425	147
6713-1075	147
6713-1650	147
6713-1651	147
6713-3010	149
6713-3100	149
6713-5036	147
6713-6010	149
6713-6050	149
6714-3602	86
6714-3604	86
6714-6004	79
6714-7501	87
6714-7502	87
6714-7504	87
6715-3601	86
6715-3602	86
6715-3604	86
6715-3682	86
6715-7501	87
6715-7502	87
6715-7582	87
6716-3602	86
6716-3612	86
6717-3602	86
6717-7504	87
6717-7510	87
6717-9501	87
6717-9502	87
6717-9504	87
6717-9510	87
6718-7504	87
6718-9502	87
6718-9582	87
6720-5001	101
6720-5002	101
6720-5045	101
6721-5010	101
6722-1001	136
6722-1002	136
6722-1003	136
6722-5000	136
6722-5001	136
6723-5000	151
6724-5000	101
6724-5002	101
6724-5010	101
6724-5045	101
6724-6004	79
6725-5002	96
6725-5002A	96
6726-5000	96
6726-5002	96
6726-5002A	96
6728-5050	101
6728-5100	101
6746-2502	117
6746-2504	117
6747-2504	118
6749-2504	118
6750-2502	117
6750-2504	117
6750-2510	117
6751-2502	118
6751-2504	118
6751-2510	118
6752-2504	118
6753-2502	118
6753-2504	118
6753-2510	118
6759-2502	118
6759-2504	118
6760-1302	117
6762-1304	117
6763-1304	117
6765-1302	117
6765-1304	117
6766-1302	117
6766-1304	117
6771-1304	117
6775-1302	116
6775-1304	116
6777-0402	116
6777-0404	116
6777-1302	116
6777-1304	116
6778-1302	117
6779-0402	116
6779-0404	116
6779-1302	117
6779-1304	117
6780-0402	116
6780-0404	116
6780-1302	117
6780-1304	117
6780-2502	117
6780-2504	117
6780-2510	117
6781-1304	117
6781-2502	118
6781-2504	118
6781-2510	118
6782-0402	116
6782-0404	116
6782-1302	117
6782-1304	117
6783-0402	116
6783-0404	116
6783-1302	117
6783-1304	117
6783-2510	118
6783-2520	118
6784-0402	116
6784-0404	116
6784-1301	117
6784-1302	117
6784-1304	117
6784-1310	117
6784-1350	117
6784-2501	117
6784-2502	117
6784-2504	117
6784-2510	117
6785-1302	117
6785-1304	117
6785-2502	118
6785-2504	118
6786-0402	116
6786-1301	117
6786-1302	117
6786-2502	117
6786-2504	117
6788-1302	117
6788-1304	117
6788-2502	118
6788-2504	118
6789-0402	116
6789-0404	116
6789-1301	117
6789-1302	117
6789-1304	117
6790-0402	116
6790-0404	116
6791-0402	116
6791-1302	117
6791-1304	117
6792-0402	116
6792-0404	116
6792-1302	117
6792-1304	117
6792-2510	118
6794-2502	118
6794-2504	118
6794-2512	118
6794-2514	118
6796-1304	117
6798-2501	118
6798-2502	118
6798-2504	118
6798-2510	118
6803-0505	191
6803-0507	191
6803-0509	191
6803-1205	191
6803-1809	191
6803-2005	191
6803-2605	191
6804-0405	191
6804-0505	191
6805-3042	191
6805-3043	191
6805-3048	191
6805-3049	191
6805-8020	192
6805-8034	191
6805-8035	191
6805-8037	191
6809-1002	106
6809-1012	106
6809-1022	106
6809-1102	106
6809-1112	106
6809-1122	106
6809-2002	107
6809-2012	107
6809-2022	107
6809-2024	107
6809-2102	107
6809-2112	107
6809-2122	107
6809-3002	107
6809-3012	107
6809-3022	107
6809-3102	107
6809-3112	107
6809-3122	107
6809-4002	107
6809-4012	107
6809-4022	107
6809-4024	107
6809-4102	107
6809-4112	107
6809-4122	107
6809-5002	69
6809-5012	69
6809-5022	69
6809-6002	69
6809-6012	69
6809-6022	69
6809-7003	69
6809-7013	69
6809-7023	69
6809-9232	107
6809-9233	107
6809-9234	107
6809-9235	107
6809-9244	107
6816-1315	117
6818-1304	117
6820-1316	117
6821-1310	117
6822-1312	117
6823-1327	117
6825-1307	117
6825-2517	117
6825-2527	118
6827-1315	117
6830-0021	94
6830-0201	94
6830-0218	94
6831-0405	94
6832-0405	94
6832-0408	94
6833-0201	94
6833-0401	94
6834-1001	94
6834-2001	94
6835-1005	94
6835-1101	94
6835-3001	94
6835-3005	94
6838-0002	94
6838-0005	94
6838-0008	94
6838-0009	94
6840-1304	126
6841-1302	126
6842-1304	126
6843-1304	126
6844-1302	126
6844-1304	126
6869-2502	110
6869-2504	110
6871-1302	110
6871-1304	110
6871-2550	110
6873-1304	110
6873-2502	110
6875-1302	110
6875-1304	110
6875-2502	110
6876-1304	110
6880-1302	110
6882-1316	110
6882-2516	110
6883-2516	111
6884-1310	110
6884-2510	111
6886-1312	110
6886-2512	111
6888-1327	110
6892-2515	111
6897-2502	111
6902-2504	111
6904-2502	111
6904-2504	111
6905-2502	111
6905-2504	111
6970-2504	112
6971-2504	112
6972-2504	112
6973-2504	112
6974-2504	112
6978-2504	112
6984-0610	142
6984-0650	142
6984-1210	142
6984-1250	142
6987-0699	142
6987-1299	142
6987-6099	142
6993-2504	112
6994-2504	112
6995-2504	112
7000-0002	33
7000-0004	33
7001-0004	33
7002-0290	49
7002-0425	49

Catalog Number	Page
7002-0447	49
7060-2504	54
7060-2506	54
7060-2508	54
7060-2510	54
7060-2511	54
7060-2513	53
7060-2514	54
7060-4702	53
7060-4710	53
7060-4713	53
7060-4716	53
7061-2502	53
7061-2504	53
7061-2510	53
7061-4702	54
7063-2502	58
7063-2504	58
7063-4702	58
7091-4710	54
7141-004	37
7141-104	37
7141-114	37
7141-124	37
7141-154	37
7141-204	37
7153-004	41
7153-104	41
7181-002	37
7181-004	37
7182-001	37
7182-002	37
7182-004	37
7182-009	37
7182-014	37
7184-001	37
7184-002	37
7184-003	37
7184-004	37
7184-008	37
7184-009	37
7184-014	37
7184-029	37
7186-002	37
7186-004	37
7187-114	41
7188-002	37
7188-003	37
7188-004	37
7188-009	37
7190-002	37
7190-004	37
7190-009	37
7193-002	37
7193-004	37
7195-002	37
7195-004	37
7195-009	37
7402-001	44
7402-002	44
7402-004	44
7402-009	44
7404-001	44
7404-002	44
7404-004	44
7404-009	44
7408-004	44
7582-002	50
7582-004	50
7585-004	50
7590-004	50
7592-104	47
800195	55
AV115NPEORG	128
AV115NPUAQU	128
AV115NPUNYL	128
AV115NPUORG	128
AV115UGMF	128
AV125EAQU	128
AV125ENAO	128
AV125EORG	128
AV125EPP	128
AV125NPUAQU	128
AV125NPUPSU	128
AV125SAQU	128
AV125SNAO	128
AV125SORG	128
AV125UAQU	128
AV125UCA	128
AV125UGMF	128
AV125UNAO	128
AV125UORG	128
AV125UPP	128
AV125URCT	128
AV525BGMF	128
AV525UAQU	128
AV525UNAO	128
AV525UORG	128
AVST25040	128
CR0000006	133
UN113EAQU	134
UN113ENYL	134
UN113EORG	134
UN113UAQU	134
UN113UGMF	134
UN113UNYL	134
UN113UORG	134
UN203APEAQU	133
UN203APENYL	133
UN203APEORG	133
UN203APEPES	133
UN203APEPP	133
UN203APUAQU	133
UN203APUDPP	133
UN203APUGMF	133
UN203APUNYL	133
UN203APUORG	133
UN203APUPES	133
UN203APUPP	133
UN203NPEAQU	131
UN203NPENYL	131
UN203NPEORG	131
UN203NPEPES	131
UN203NPEPP	131
UN203NPERC	132
UN203NPUAQU	131
UN203NPUDPP	131
UN203NPUGMF	131
UN203NPUNYL	131
UN203NPUORG	131
UN203NPUPES	131
UN203NPUPP	131
UN203NPURC	132
UN503NPEAQU	131
UN503NPENYL	131
UN503NPEORG	131
UN503NPEPES	131
UN503NPEPP	132
UN503NPERC	132
UN503NPUAQU	132
UN503NPUDPP	132
UN503NPUGMF	132
UN503NPUNYL	132
UN503NPUORG	132
UN503NPUPES	132
UN503NPUPP	132
UN503NPURC	132
US203NPEAQU	132
US203NPENYL	132
US203NPEORG	132
US203NPEPES	132
US203NPEPP	132
US203NPUAQU	132
US203NPUDPP	132
US203NPUGMF	132
US203NPUNYL	132
US203NPUORG	132
US203NPUPES	132
US203NPUPP	132
US503NPEAQU	132
US503NPENYL	132
US503NPEORG	132
US503NPEPES	132
US503NPEPP	132
US503NPUAQU	132
US503NPUDPP	132
US503NPUGMF	132
US503NPUNYL	132
US503NPUORG	132
US503NPUPES	132
US503NPUPP	132

Trademarks

Trademarks and Registered Trademarks of Companies within the Whatman Group

Trademarks

AccuFlow™
Aqueous IFD™
AUTOCUP™
Autovial™
BackPulse™
Benchkote Plus™
Butterfly™
Carbon Cap™
Chip Clip™
Clear View™
ColiCheck™
CombiClamp™
EasyClone™
EasyDisc™
EpiCount™
Extractor™
FilterCup™
GenPrep™
GenSpin™
GenXTrak™
Hemafil™
HEPA-CAP™
HEPA-VENT™
IFD™
MicroCaster™
Micro Punch™
Mini-UniPrep™
Multi-Chem™
NC™
PCR Cleanup™
PlantSaver™
Polycap™
Polydisc™
PolyVENT™
Pop-Top™
Puradisc™
Purasil™
Solvent IFD™
SteriVENT™
SwabCheck™
Swin-Lok™
TurboBlotter™
UniCell™
UniPCR™
UNIPLATE™
UniSeal™
UniVac™
UVMax™
VacAssist™
VACU-GUARD™
VectaSpin™
VectaSpin™ 3
VectaSpin™ 20
VectaSpin™ Micro

Registered Trademarks

Anodisc®
Anopore®
Anotop®
AOX®
Benchkote®
BugStopper®
CELTRON®
CENTREX®
CloneSaver®
Cyclopore®
CrypTest®
Elutip-d®
Elu-Quik®
Elutrap®
EXPRESS-ION®
FAST®
FAST Quant®
FTA®
FTA® Elute
GD/X®
GF/C®
Membra-Fil®
Minifold®
Nuclepore®
NutriDisk®
Nytran®
Optitran®
Partisil®
PartiSphere®
POLYTRAP®
Protran®
Reeve Angel®
ReZist®
S&S®
SELECTRON®
SHARK SKIN®
SPARTAN®
UNIFILTER®
UniPrep®
Westran®
Whatman®
ZapCap®
41®
903®
934-AH®

Other Trademarks and Registered Trademarks

AmpFLSTR®, Aurodye®, CDP Star®, CSPD®, Cofiler® and Profiler Plus® are registered trademarks of Applied Biosystem

ArrayVision® is a registered trademark of Imaging Research Inc.

BigDye® is a registered trademark of PE Corp.

BioMax® is a registered trademark of Eastman Kodak Co.

BioMek® is a registered trademark of Beckman Coulter, Inc.

Coomassie® and Coomassie Brilliant Blue® are registered trademarks of Imperial Chemical Industries

Chelex® is a registered trademark of Bio-Rad Laboratories

Cy® and ECL® are registered trademarks of GE Healthcare

Delrin® is a registered trademark of E.I. du Pont de Nemours

Dy 647® and Dy 567® are registered trademarks of Dyomics Gmbh

Florisil® is a registered trademark of U.S. Silica

Kimwipes® is a registered trademark of Kimberly-Clark

Lumi-Light® is a registered trademark of Roche Diagnostics Corp.

Lumi-Phos® is a registered trademark of Lumigen, Inc.

Mylar® is a registered trademark of DuPont Teijin Films

Nonidet® is a registered trademark of Shell

Parafilm® is a registered trademark of American National Can Co.

PicoGreen® is a registered trademark of Molecular Probes, Invitrogen Inc.

Plexiglas® is a registered trademark of Autoglas

Scan Array® is a registered trademark of Perkin Elmer Co.

Soxtec™ is a trademark of Tecator

Super Signal® is a registered trademark of Pierce Biotechnology Inc.

Taxol® is a registered trademark of Bristol-Myers Squibb Co.

Teflon® is a registered trademark of E.I. Dupont de Nemours

Telechem® and Telechem Chipmaker® are registered trademarks of Telechem International, Inc.

TempliPhi™ is a trademark of GE Healthcare, formerly Amersham BioSciences

Triton® is a registered trademark of Rohm & Haas Co.

Tween® and Tween 20® are registered trademarks of ICI Americas

ULS® is a registered trademark of KREATECH Biotechnology BV

Vitron® is a registered trademark of DuPont

Zymark® is a registered trademark of Caliper Life Sciences

The PCR process is covered by patents owned by Hoffmann-LaRoche, Inc.

These trademarks and registered trademarks are accurate to the best of our knowledge at the time of printing.