Cylinder, Graduated, Polycarbonate

Clear polycarbonate cylinder is autoclavable and withstands temperatures to 138°C (280°F). Features easy to read graduations in durable fused ink.

Prod. No.	Capacity	Subdivisions	Unit
2117940	25 mL	0.5 mL	each
2117941	50 mL	0.5 mL	each
2117942	100 mL	1.0 mL	each
2117946	250 mL	2.0 mL	each
2117949	500 mL	5.0 mL	each
2117953	1000 mL	10.0 mL	each

Cylinder, Graduated, Polymethylpentene

This cylinder features transparent, nontoxic, noncontaminating, and biologically inert material with excellent chemical resistance. Meets ASTM E1272 Class B accuracy requirements, ISO Standard 6706, and suitable for food and beverage use (PMP resin meets requirements of CFR 21, Part 177.1520). Calibrated "To Contain/To Deliver" at 20°C (68°F). Shatterproof and thermally resistant to 135°C (275°F). Absence of meniscus for easy-to-read levels on front-to-back raised graduations.

Prod. No.	Capacity	Subdivisions	Tolerance	Unit
217238	10 mL	0.2 mL	±0.20 mL	each
217240	25 mL	0.5 mL	±0.34 mL	each
217241	50 mL	1.0 mL	±0.50 mL	each
217242	100 mL	1.0 mL	±1.0 mL	each
217246	250 mL	2.0 mL	±2.0 mL	each
217249	500 mL	5.0 mL	±4.0 mL	each
217253	1000 mL	10.0 mL	±6.00 mL	each

Cylinder, Graduated, Polypropylene

Polypropylene construction of both cylinder and base. All sizes have generous pour spout, large molded-in, and easy-to-read graduations. Can be chemically sterilized without affecting accuracy. Autoclavable, but accuracy will be adversely affected. Cylinders meet accuracy requirements of ASTM Class B, E1272, ISO Standard 6706, and CFR 21, Part 177.1520.

Prod. No.	Capacity	Subdivisions	Tolerance	Unit
108138	10 mL	0.2 mL	±0.20 mL	each
108140	25 mL	0.5 mL	±0.34 mL	each
108141	50 mL	1.0 mL	±0.50 mL	each
108142	100 mL	1.0 mL	±1.0 mL	each
108146	250 mL	2.0 mL	±2.0 mL	each
108149	500 mL	5.0 mL	±4.0 mL	each
108153	1000 mL	10.0 mL	±6.00 mL	each
108154	2000 mL	20.0 mL	±12.00 mL	each

Cylinder, Graduated, Polypropylene, HOLDFAST™

One-piece polypropylene construction with a molded in handle top ensure a secure, solid grip and superior control for safer, more convenient pouring. The "Total Contained, Total Delivered" double scale is accurate and easy to read (cylinder will not create a meniscus), while the hexagonal base prevents tipping or rolling. Hand opening is 89 x 29 mm (3 x 1-1/8"). Steam autoclavable up to 121°C (250°F).

Prod. No.	Capacity	Unit
2612953	1000 mL	each
2612954	2000 mL	each

Cylinder, Graduated, Mixing, Glass

This glass graduated cylinder is calibrated "to contain" with a molded in base. Each includes glass penny head stopper. Graduations are in durable white enamel bake.

Prod. No.	Capacity	Subdivisions	Tolerance	Stopper
2088638	10 mL	0.2 mL	±0.1 mL	13
2088640	25 mL	0.1 mL	±0.2 mL	13
2088641	50 mL	1.0 mL	±0.5 mL	16
2088642	100 mL	1.0 mL	±1.0 mL	16

Cylinder, Graduated, Mixing, Class A

This certified, Class A glass mixing cylinder is calibrated "to contain" according to ASTM E542 & E1272. Serialized and traceable to NIST standards (includes Certificate of Identification and Capacity). Single metric scale in durable white markings with funnel-top. Glass penny head stopper included.

Prod. No.	Capacity	Subdivisions	Tolerance	Stopper
2636340	25 mL	0.2 mL	±0.14 mL	13
2636341	50 mL	1.0 mL	±0.20 mL	16
2636342	100 mL	1.0 mL	±0.35 mL	22
2636349	500 mL	5.0 mL	±1.10 mL	32

Cylinder, Graduated, Mixing, Class B

Scale is durable white ceramic enamel. Designed to meet ASTM Specification E1272, Style 2 (Class B). Includes glass stopper.

Prod. No.	Capacity	Subdivisions	Tolerance	Stopper
189640	25 mL	0.5 mL	±0.3 mL	13
189641	50 mL	1.0 mL	±0.4 mL	16

Desiccant

Indicating Drierite® changes from a blue color when dry to red upon absorption of moisture. Packaged in 454-g (1 lb) containers.

Prod. No.	Description	Unit
2285901	Drierite (without indicator)	each
2088701	Indicating Drierite	each

Desiccator Cabinet, Non-Vacuum

Stackable, polystyrene, transparent from any side. Door has foam rubber gasket, two roller latches for airtight fit. Jar of silica gel included. Inside dimensions: 21 x 18 x 13 cm (8.25 x 7 x 5"). Door opening: 19 x 11 cm (7.5 x 4.4"). Desiccator Grease available and sold separately.

Prod. No.	Description	Unit
2618100	Polystyrene Desiccator	each
56275	Desiccator Grease	each

Desiccator, Polycarbonate

Round polycarbonate cover and polypropylene base create implosion-proof chamber at full vacuum. Chamber is impervious to alkali and acidic conditions. Recessed rim prevents grease (not included) from contacting bench surfaces when removed and eliminates need for a separate gasket. Vacuum model features leak-proof stopcock. Dimensions (height x diam): 245 mm x 330 mm (9.7" x 13"). Holds 454 g (1 lb) of dessicant. Ceramic dessicator plate (sold separately) is inert, non-stick, and corrosion resistant. Quadrants crafted into plate for easy tracking of material locations. Plate diameter: 230 mm (9").

Prod. No.	Description	Unit
2088800	Vacuum Desiccator	each
1428500	Non-vacuum Desiccator	each
1428400	Ceramic Desiccator Plate	each
56275	Desiccator Grease	each

Desiccator, Polycarbonate

Round polycarbonate top provides lightweight vessel with unmatched transparency. Polypropylene lower section creates support chamber at full vacuum. Stopcock for vacuum applications (1/4-3/8" OD vacuum tubing, sold separately). Holds 28 in Hg (711 mm) for 24 hrs. Silicone O-ring makes grease unnecessary. For room temperature, non-organic solvent, and non-autoclave uses only. Optional Ceramic Desiccator Plate available and sold separately. Ceramic Plate features marked, numbered quadrants for easy location of crucibles and other containers.

Prod. No.	Description	Unit
2238300	Polycarbonate Desiccator	each
1428400	Ceramic Desiccator Plate	each

Detergent, Alconox® Powder

Anionic powder for general-to-critical cleaning. pH 9.0-9.5. Contains phosphate.

Prod. No.	Description	Unit
2088000	1.8 kg (4 lb)	each

Detergent, Alcotabs®

Effervescent tablet. Recommended for glassware cleaning with siphon-tube rinsers. Contains phosphate.

Prod. No.	Description	Unit
2088200	100 tablets	each

Detergent, Liqui-Nox®

Anionic and non-ionic detergents with wetting agents. pH 8.0-8.6.

Prod. No.	Description	Unit
2088153	946 mL (1 qt)	each
2088117	3.78 L (1 gal)	each

Detergent, RoVer® Rust Remover

Fast-acting RoVer gets rid of stains on glassware. A 10 minute soak in a solution of 2 tablespoons RoVer/gallon of water restores clarity to glassware.

Prod. No.	Description	Unit
30001	454 g	each
30012	454 g	12/pk
30040	18 kg	each

Dish, Glass, Evaporating

Glass flat bottom dish with straight sides. Reinforced and firepolished rims reduce chipping. Ideal for storage and crystallization.

Prod. No.	Capacity	Diameter x H (mm)	Unit
2764700	740 mL	125 x 65	each

Dish, Evaporating, Porcelain

Deep-form, round bottom with lip. Glazed except for rim. Temperatures to 1500°C (max change = ±200°C/hr).

Prod. No.	Capacity	Diameter x H (mm)	Unit
52590	70 mL	75 x 30	each
52561	120 mL	94 x 42	each
52565	250 mL	115 x 45	each

Dish, Disposable

Aluminum dish for evaporating and general utility use. Slightly fluted sides with flanged rims. Temperature range 0 to 426°C (800°F). Melting point 676°C (1250°F). Dish height approx. 3/4".

Prod. No.	Capacity	Diameter x H (mm)	Unit
2164000	60 mL	57	100/pk

Dish, Moisture Determination

Prod. No.	Diameter	Unit
2551910	10 cm (4")	50/pk

Dish, Petri, Polystyrene

Smaller size standard for water, wastewater, food and beverage analysis using 2.0 mL media. Stackable and disposable. Available with or without nutrient pad.

Prod. No. 1485299

Prod. No. 2936300

Prod. No.	Description	Unit
1485299	Dish only	100/pk
1485200	Dish only	500/pk
2936300	Dish w/pad (Millipore)	150/pk
1471799	Dish w/pad (PALL)	100/pk
1491800	Absorbent Pad w/ Dispenser	1000 pads (10 tubes/100 pads)

Dispenser, Digital, Adjustable-Volume

Attach dispenser directly to reagent bottle for adjustable dispensation with a single stroke. Inert hardware designed to handle alkaline, acidic and organic solutions. Autoclavable (121°C). Dispensers fits bottles with a 33 mm screw-neck finish (supplied with adapters to fit 28, 38 and 45 mm finishes). Dispenser rotates 360°.

Prod. No.	Description	Accuracy	Variation	Unit
2563137	1.0-5.0 mL	<0.7%	<0.1%	each
2563140	1.0-10.0 mL	<0.7%	<0.1%	each

Dispenser, Fixed-Volume, Repipet Jr.

The Fixed-Volume Repipet precisely dispenses liquid reagents used to determine soluble silica in pure and ultrapure water in a laboratory setting using Hach Method 8282 (Heteropoly Blue Rapid Liquid Method). Features include:

- Convenient, precise reagent addition
- Ability to use process analyzer reagents (to validate performance of the analyzer with a lab method)
- Use with Pour-Thru Cell allows precise, low-concentration measurements

Prod. No.	Description	Unit
2111302	1.0 mL Dispenser	each
2270534	Replacement plunger and barrel	each
2199100	Replacement valve seals	2/pk
2937906	Amber glass bottle 437 mL (16 oz)	6/pk

Dissolved Oxygen Meter

NEW!

Meter measures Dissolved Oxygen (DO) to determine water quality in a variety of applications including wastewater, aquariums and fish hatcheries. Simultaneously displays DO and temperature readings.Unit holds and recalls minimum and maximum readings. Features automatic temperature compensation and calibration to air. Meter is ready for use and includes a soft carrying case with belt loop, two spare probe heads, electrolyte and 4 AAA batteries.

Description	Range	Resolution	Accuracy
Dissolved Oxygen	0 ~ 20.0 mg/L	0.1 mg/L	±0.4 mg/L
Oxygen % in Air	0 ~ 100.0%	0.1 %	±0.7%
Temp	0 ~50°C	0.1°C	±0.8°C

Prod. No.	Description	Unit
2968800	DO Meter	each
2968810	Replacement Probe Head	each
2968820	Replacement Electrolyte	each

Distillation Apparatus

Fast set-up for sample pretreatment. Distillation sets include only EPA-approved glassware. Easy to set up because you only receive the parts you need. Illustrated, step-by-step procedures simplify distillation.

Prod. No.	Description	Unit
2265300	General Purpose Distillation Apparatus Set (Heater and support apparatus also required)	each
2265400	Arsenic Set (General Purpose Set and Heater and Support Apparatus also required)	each
2265800	Cyanide Set (General Purpose Set and Heater and Support Apparatus also required)	each

Accessories

2264806	Connector (20400 to 20400), J-tube	6/pk
2274000	Connector (13425), Thermometer	each
2274106	Connector (24400 to 24400), Cylinder	6/pk
2265308	Distillation Procedures Manual	each
2274400	Heater and Support Apparatus 115 Vac, 60 Hz	each
2274402	Heater and Support Apparatus, 230 Vac, 50 Hz	each
2274300	Laboratory Platform Jack	each
2095926	Thermometer, mercury, -10 to 260°C (20 to 500°F)	each

Be sure to see our complete Sample Preparation Section, pages 103-108.

General Purpose Assembly with Heater and Support

Heater and Support sold separately.

Distillation Apparatus Replacement Parts

Product No.	Description	Distillation Set: General Purpose	Arsenic	Cyanide	Pack
50048	Beaker, glass, 400 mL	•	•	•	each
50547	Flask, Erlenmeyer, 300 mL	•	•	•	each
2095351	Stir bar, octagonal, 25.4 x 7.9 cm (1.0 x 0.3 ")	•	•	•	each
2095926	Thermometer, mercury, -10 - 260°C	•	•	•	each
2264649	Flask, distillation, 500 mL	•	•	•	each
2264706	Cap, black phenolic, 20-400	•	•	•	pk/6
2264806	Connector, 20-400 to 20-400	•	•	•	pk/6
2264900	J-tube, 20-400	•	•	•	each
2265000	Condenser, 20-400	•	•	•	each
2265100	Drip tube, 20-400	•	•	•	each
2273900	Cap, black phenolic, 13-425	•	•	•	each
2274000	Connector, thermometer, 13-425	•	•	•	each
2274106	Connector, 24-400 to 24-400	•	•	•	pk/6
2264467	Funnel, powder		•		each
2265500	Gas Scrubber, 20-400		•		each
54649	Flask, filtering, 500 mL			•	each
56018	Tubing, latex, 1/4 " ID, 12 '	•		•	each
213100	Aspirator, w/ check valve			•	each
679045	Cable tie	•		•	each
1787500	Flowmeter, air			•	each
1787700	Stopper assembly			•	each
1810602	Tubing, latex, 3/16" ID, 2'			•	each
2265600	Thistle tube			•	each

Electrochemistry Meters

Conductivity Eco Testr™ 2

NEW!

The Eco Testr features rugged stainless steel pin sensors for quick and reliable measurements, time after time. Display orientation means no need to turn your head or tilt the tester. Push-button calibration, hold-function and high accuracy make this testr ideal for a wide range of applications. Other features include:

- *Automatic Temperature Compensation*
- *Auto-off function*
- *Waterproof, dustproof housings that float*

Testr	Resolution	Accuracy	Operating Temp
Eco Low	10 µS/cm	±1 % full scale	0 to 50ºC
Eco High	0.1 mS/cm	±1 % full scale (±2 % above 10 mS/cm)	0 to 50ºC

Prod. No.	Description	Unit
2520220	Eco Testr Low, 0 - 1990µS/cm	each
2520230	Eco Testr High, 0 – 19.90mS/cm	each
2520100	Belt-loop Carrying Pouch	each
2307542	Calibration Solution, NaCl	100/mL

Dissolved Oxygen Meter

NEW!

Meter measures Dissolved Oxygen (DO) to determine water quality in a variety of applications including wastewater, aquariums and fish hatcheries. Simultaneously displays DO and temperature readings.Unit holds and recalls minimum and maximum readings. Features automatic temperature compensation and calibration to air. Meter is ready for use and includes a soft carrying case with belt loop, two spare probe heads, electrolyte and 4 AAA batteries.

Description	Range	Resolution	Accuracy
Dissolved Oxygen	0 ~ 20.0 mg/L	0.1 mg/L	±0.4 mg/L
Oxygen % in Air	0 ~ 100.0%	0.1 %	±0.7%
Temp	0 ~50°C	0.1°C	±0.8°C

Prod. No.	Description	Unit
2968800	DO Meter	each
2968810	Replacement Probe Head	each
2968820	Replacement Electrolyte	each

Multi-Parameter Meter

NEW!

No need to switch meters every time you switch parameters.This tester measures pH, Conductivity, TDS, Salinity and Temperature with one versatile pocket-sized meter! Replaceable sensor lets you reuse the meter body many times over saving you money. Waterproof design that floats so you never watch another meter sink again.

Range(s)				
Conductivity	0.0 to 199 µS	200 to 1999 µS	2.00 to 20.00 mS	
TDS	0.0 to 99.9 ppm	100 to 999 ppm	1.0 to 10.00 ppt	
Salinity	0.0 to 99.9 ppm	100 to 999 ppm	1.0 to 10.00 ppt	0.0 to 1.00%
pH	0.0 to 14.0			
Temperature	0.0 to 50.0°C			

Prod. No.	Description	Unit
2519800	Multi-Parameter Tester	each
2519900	Replacement Sensor	each
2520100	Belt-loop Carrying Pouch	each

ORP Testr™ 10

Ideal for water treatment applications including ozone systems, free chlorine activity, drinking water and water pollution. Replaceable electrode lets you reuse the meter body many times over saving you money. Double-junction electrode design significantly extends electrode life, especially in harsh conditions. Features Hold function and Auto-off.

- *Auto-off function*
- *Waterproof, dustproof housings that float*
- *Include four 1.5V batteries*

NEW!

Range	Resolution	Accuracy	Calibration	Operating Temp
-999 to +1000 mV	1 mV	±2 mV	Offset ±150 mV	0 to 50°C

Prod. No.	Description	Unit
2967400	ORP Testr 10	each
2967500	Replacement Sensor for ORP	each
2520100	Belt-loop Carrying Pouch	each

pH Eco Testr™ 2

NEW!

Single junction electrode is well suited for general-purpose, less demanding applications. Ideal for dirty and damp field conditions. Display orientation means no need to turn your head or tilt the tester. Buffer recognition at 4.0, 7.0 and 10.0. Other features include:

- *Automatic Temperature Compensation*
- *Auto-off function*
- *Waterproof, dustproof housings that float*

Range	Resolution	Accuracy	Calibration	Power	Battery Life
0.0 to 14.0 pH	0.1 pH	±0.1 pH	up to 3 Point	4 x 1.5V	>300 hours

Prod. No.	Description	Unit
2520200	Eco pH Testr 2	each
2520100	Belt-loop Carrying Pouch	each

pH Testr™ 10

pH Testr is the perfect tool for quick, routine pH testing. Replaceable electrode lets you reuse the tester body many times over, which saves you money. Testr is certifiable to IP67 standards, and features Automatic Temperature Compensation (ATC), push-button three-point calibration and auto buffer recognition. Double Junction Testr features unique double junction electrode design and increased reference gel volume to give you significantly longer electrode life, especially in harsh applications. See pages 52-53 for Buffers required for calibration.

Range	Resolution	Accuracy	Calibration	Power	Battery Life
-1.0 to 15.0 pH	0.1 pH	± 0.1 pH	up to 3 Point	4 x 1.5V	>100 hours

Prod. No.	Description	Unit
2956100	Double Junction pH Testr	each
2956110	Replacement electrode – Dbl. Junction pH Testr	each

Electrochemistry Meters continued on next page.

Electrochemistry Meters (continued)

Salt Tester

Low Range Tester

High Range Tester

Low Range Tester is ideal for spot checking NaCl-based samples. Display reads direct concentration—no manual corrections are necessary. Push button calibration provides easy and precise field calibration. Hold function freezes measurement for easy viewing and recording. Measures up to 10.00 ppt salinity.

High Range Tester displays a quick ppm readout based on NaCl curve and offers two modes of five-point calibration. For quick and easy calibrations, use automatic mode with preset calibration points at the most popular values. For more flexibility, calibrate in the manual mode and set your calibration point at any value. Measures up to 50.0 ppt salinity.

Prod. No.	Description	Unit
2510700	Salinity Tester - Low Range	each
2510800	Salinity Tester - High Range	each
18349	Calibration Solution, NaCl, 500 mL	each

Total Dissolved Solids Eco Testr™ 2

Economical and easy to use, this Testr features an adjustable TDS factor from 0.4 to 1.0, which allow TDS measurement in a wide range of applications. Display orientation means no need to turn your head or tilt the tester. Push-button calibration, hold-function and high accuracy make this testr ideal for a wide range of applications. Other features include:

NEW!

- *Automatic Temperature Compensation*
- *Auto-off function*
- *Waterproof, dustproof housings that float*

Testr	Resolution	Accuracy	Operating Temp
Eco TDS Low	10 ppm	±1% full scale	0 to 50 °C
Eco TDS High	0.1 ppt	±1% full scale (±2% above 5 ppt)	0 to 50 °C

Prod. No.	Description	Unit
2520240	Eco TDS Low, 0 – 1990 ppm	each
2520250	Eco TDS High, 0 – 10.00 ppt	each
1440042	TDS Standard-Low Range	100 mL
2307442	TDS Standard-High Range	100 mL
2520100	Belt-loop Carrying Pouch	each

Electrode Washing Station

Provides a safe, convenient work station to clean delicate pH electrodes without the risk of damage to the sensors. Unit consists of a polyethylene spray chamber to surround electrodes, a 500 mL polyethylene distilled water reservoir and a length of tubing to drain the chamber. The electrode hangs into the spray chamber and with a squeeze of the reservoir, a spray of water rinses the electrode. Base diameter is 14cm (5.5"). Washer height is 21cm (8.25").

Prod. No.	Description	Unit
2704700	Electrode Washing Station	each

Eye Wash Bottle

Pocket bottle provides portable, immediate eye-wash care for field and on-site eye care. Includes polyethylene bottle with eye cup and snap-on cover. Instructions printed on bottle. Eye wash solution not included.

Prod. No.	Description	Unit
2239514	120 mL (4 oz) eye wash bottle	each

Filter Capsules & Holders

PALL Envirocheck HV Sampling Capsule

Simple and safe capsules eliminate contact with organisms. No filter holder assembly or cleaning required, and the self-contained capsule means that the potentially contaminated filter element does not need to be handled or cut apart. Capsules replace traditional string wound filter method and increase capture and recovery of organisms by 15 times.Capsule method results in a smaller pellet after elution, requiring less analysis time and cost, and does not affect the viability of the organisms like harsh chemicals used in other techniques. Disposable design eliminates false positives from cross-contamination. The 1 µm pore size membrane eliminates false negatives for 100% collection of Cryptosporidium and Giardia. Serialized for traceability. Approved by regulatory agencies worldwide, including U.S. EPA methods 1622 and 1623, United Kingdom DWI standard operating protocols, and ISO/DIS 15553.

Prod. No.	Description	Unit
2686100	Envirocheck Sampling Capsule	each
2811200	Envirocheck HV Sampling Capsule	each
2811225	Envirocheck HV Sampling Capsule	25/pk

Filter, Groundwater, High Capacity, GWV

Compact, disposable in-line filters for dissolved metals analysis. Eliminate cleaning and autoclaving steps and reduce multiple filter changes when sampling silt and particulate-laden groundwater. Polypropylene Housing. Supor® Filters: 0.45 µm pore size; 600 cm^2 effective filtration area; 6.8 cm diameter; 13.7 cm with fittings; tapered hose barb accepts 6.4 to 12.7 mm (1/4 to 1/2") tubing; continuous 60 psid at ambient temperature.

Prod. No.	Unit
2670500	each

PALL AcroCap™ Positive Pressure Device

For sterilization or clarification of up to three liters of culture media or other aqueous solutions. Ideal for sterilization of solutions that tend to foam when filtered under vacuum. Inlet accepts 6.4 mm (0.25") tubing or most male luer fittings.

Prod. No.	Description	Unit
2323810	AcroCap Positive Pressure Device	10/pk

Filter Capsules & Holders continued on next page.

Filter Capsules & Holders (continued)

Syringe Filters, Non-Sterile

Syringe filters offer an efficient way to remove particulates from samples prior to analysis. Filters feature 20% more surface area than standard 25 mm filters, which increases flow rates and capacity. Choose PVDF filters for solutions containing proteins. Choose Nylon filters for broad chemical compatibility and organic solutions. Standard Female Luer-Lok inlet with standard male slip Luer outlet. Hydrophilic.

Prod. No.	Description	Diameter	Pore Size	Unit
2513605	Nylon Syringe Filter	33 mm	0.2µm	50/pk
2513601	PVDF Syringe Filter	33 mm	0.22µm	50/pk
2513603	PVDF Syringe Filter	33 mm	0.45µm	50/pk

Syringe Filters, Sterile

This Hydrophilic polyethersulfone (PES) filter has a faster flow rate and twice the throughput of standard 25 mm syringe filters. Sterilized by gamma irradiation. Standard Female Luer-Lok inlet with standard male slip Luer outlet.

Prod. No.	Description	Diameter	Pore Size	Unit
2513700	PES Sterile Syringe Filter	33 mm	0.22µm	50/pk

PALL AcroDisc® Syringe Filters

For filtration of dilute biological fluids. Sterilized by gamma irradiation to eliminate potential contamination by EtO residuals. Inlet/Outlet connections:13/25 mm: Female Luer-Lok inlet, standard male slip luer outlet. Pore size: 0.2 µm. Diameter: 25 mm.

Prod. No.	Description	Unit
2415600	AcroDisc Syringe Filters	each

PALL Easy Pressure Syringe Filter Holder

Accepts 25 mm filter discs for fast filtration of 1-10 mL of sample. Autoclavable. Fits most standard syringes with Luer inlet and outlets.

Prod. No.	Description	Unit
246800	Easy Pressure Syringe Filter Holder	each
2258700	60 cc syringe	each

Millipore Microfil and Microfil V Funnels

Designed to eliminate cleaning and sanitization of filter funnels between uses. Graduated (20, 50, and 100 mL) 100 mL funnels are sterile and ready-to-use. Funnel creates leak-proof seal when seated onto Microfil Stand Alone Support. Excellent for testing water samples from potable, non-potable, source, ambient, industrial, food, beverage, pharmaceutical and wastewater sources. Microfil funnels come with 72 Millipore filters (white; gridded; cellulose and mixed ester composition; 0.45 µm pore size; 47 mm diameter; sterile; individually packed). Microfil V includes integrated filter for added convenience and can be used with standard No. 8 stopper on any filter holder or manifold.

Prod. No.	Description	Unit
2586300	Microfil Funnels; 100 mL	150/pk
2508900	Microfil V Funnels, 100 mL, w/integral membrane	24/pk

Millipore Microfil Stand Alone Support

For membrane filtration features unique membrane lifting device. Depressing the lever breaks the vacuum and lifts the membrane above the 47 mm membrane support for easy retrieval with sterilized forceps. Designed for use with Microfil funnels (see Filtration Funnels), creating an efficient, low-maintenance system for membrane filtration in the lab or field. Rugged metal construction with vacuum side-arm at the base. Works with any vacuum source

Prod. No.	Description	Unit
2586200	Millipore MicroFil Filter Assembly	each
2586100	140 cc syringe	each

PALL MicroFunnel™ LP Funnels

Feature a completely assembled filtration unit: Funnel, filter, nutrient pad and petri dish. Filter: GN-6 Metricel with 0.45 µm pore size and 47 mm diameter; white, gridded surface. Funnel: Polypropylene Petri Dish: polystyrene lid and polypropylene base Nutrient Pad: Cellulose. Fits 2831500, 2846100 and 2846150 manifolds. Sterile and individually bagged.

Prod. No.	Description	Unit
2831500	MicroFunnel™ LP Funnels	50/pk

PALL MicroFunnel™ II Funnels

Feature a completely assembled filtration unit: Funnel, filter, and petri dish. Filter: 47 mm, white with gridded surface, 0.45 µm GN-6 Metricel media Funnel: Polypropylene Petri Dish: polystyrene lid and polypropylene base Fits 28315-00, 28461-00 and 28461-50 manifolds. Sterile and individually bagged.

Prod. No.	Description	Unit
2619000	MicroFunnel™ II Funnels	50/pk

Filters, Disc and Membrane

Filter Discs

Glass fiber filter ideal for volatile suspended solids of water and wastewater. Also ideal for TCLP analysis. Filters can withstand temperatures of 550ºC (1022ºF).

Prod. No.	Diameter	Pore Size	Unit
2513801	47 mm	0.7 µm	100/pk

For use in a wide-range of laboratory applications, these discs are composed of Mixed-Cellulose Esters and are the industry standard for particulate removal, particulate analysis and clarification of fluids.

Prod. No.	Diameter	Pore Size	Unit
2514103	25 mm	0.45 µm	100/pk

Millipore S-Pak Type HA Membrane Filters

For membrane filtration in microbiological analysis of aqueous samples. “HA” signifies certified compliance with Standard Methods criteria with pore size of 0.45 µm. White, cellulose and mixed-ester composition. S-Pak (filter only) is sterile. Diameter: 47 mm.

Prod. No.	Description	Unit
2936500	S-Pak (individually packaged) HA-type: gridded, sterile	600/pk

Millipore S-Pak Type HC Membrane Filters

Certified for fecal coliform analysis. Larger pore size (0.7 µm) and funnel-like pores creates a less taxing environment for stressed organisms: lessens media loss from evaporation and easier filtration of high particulate samples common to effluents. White cellulose and mixed-ester composition. Sterile and individually packaged. “HC” signifies certified compliance with Standard Methods criteria with pore size 0.7 µm. Diameter: 47 mm.

Prod. No.	Description	Unit
2936600	S-Pak (individually packaged) HC-type: gridded, sterile	pk/600

Millipore EZ Pak System

Dispenser provides superior convenience and assures sterility. Unique one press on the lever and a sterile membrane is presented (horizontally and inverted) for efficient and convenient assembly. The EZ Pak membranes come as a band of membranes that easily loads into the dispenser. Packaging materials are wound into the dispenser ensuring a clear operating area and quick change of bands. The membranes are Type HA, which signifies compliance with Standard Methods criteria.

Prod. No.	Description	Unit
2916700	Millipore EZ Pak Dispenser	each
2916800	Millipore EZ Pak membranes; white, gridded, 0.45 µm pore size, 47 mm	600/pk (4 x 150)
2915900	Millipore EZ Pak membranes; black, gridded, 0.45 µm pore size, 47 mm	600/pk (4 x 150)
2916900	Millipore EZ Pak membranes; white, gridded, 0.22 µm pore size, 47 mm	600/pk (4 x 150)

PALL GN-6 Metricel Membrane Filters

White mixed-cellulose ester media provides maximum retention, recovery and enumeration of microorganisms. Filters are ideal for membrane filtration of total and fecal coliforms, *E. coli*, Streptococcus species, heterotrophic bacteria and fungi. Meets or surpasses USEPA and ASTM specifications.
Pore size: 0.45 µm. Diameter: 47 mm.

Prod. No.	Description	Unit
1353000	Plain, non-sterile	100/pk
2618901	Gridded, non-sterile	100/pk
1353001	Individually packaged, gridded, sterile	200/pk
1353002	Individually packaged, gridded, sterile	1000/pk
2126900	10 x pk/10, gridded, sterile, w/nutrient pad	100/pk

PALL Supor® 200 Membrane Filter

For isolation and enumeration of stressed organisms (Pseudomonas species). High retention and flow rate. Certified for use in membrane filtration analysis. White polyethersulfone media. Sterile and individually packaged.
Pore size: 0.2 µm. Diameter: 47 mm.

Prod. No.	Description	Unit
2618800	Supor 200 Membrane Filter (ind. packaged): gridded, sterile	200/pk

PALL Metricel® Black Membrane

Provides contrast for microbiological and particulate analysis.Modified polyethersulfone creates dark background for excellent contrast useful in enumerating opaque colonies and light-colored particulate. White grid line aids enumeration. Certified for membrane filtration analysis. Sterile and individually packaged. Pore size: 0.45 µm. Diameter: 47 mm.

Prod. No.	Description	Unit
2490300	Metricel Black Membrane Filter (ind. packaged): gridded, sterile	200/pk

Filters, Glass Microfiber

Useful for high through-put prefiltration of viscous and heavily contaminated samples. Pack of 100.

Prod. No.	Diameter	Pore Size	Comparable Grade
2551400	47 mm	1.0 µm	GM – AE

Filtration of suspended solids in water, wastewater and as a prefilter for membranes. Pack of 100.

Prod. No.	Diameter	Pore Size	Comparable Grade
2215500	24 mm	1.0 µm	GM – B

Standard filter for the clarification and monitoring of water and wastewater. Pack of 100.

Prod. No.	Diameter	Pore Size	Comparable Grade
2551600	21 mm	1.2 µm	GM - C

Made from 100% borosilicate glass fibers. Best used in general laboratory work and as a prefilter for membrane filtration. Pack of 100.

Prod. No.	Diameter	Pore Size	Comparable Grade
2164300	70 mm	2.7 µm	GM – D

Made from 100% borosilicate glass fibers. Filters the finest particles from HPLC solvents or TLCP extracts. Pack of 100.

Prod. No.	Diameter	Pore Size	Comparable Grade
2676600	47 mm	0.7 µm	GM - F

Filters, Preweighed Glass Fiber

Individually preweighed 47 mm Quik-Weigh filter papers—pretreated, preweighed in compliance with Standard Methods Total Suspended Solids procedure. Box of 100, each in 65 mm planchet with tare weight listed. Each tare weight meets Standard Methods specifications. Pack of 100.

Prod. No.	Diameter (mm)	Pore Size
2546100	47	1.5 µm

Filters, Qualitative (QL)

QL Filters are recommended for use in various environmental and wet chemistry reference methods. Extremely pure cellulose filters of nearly 100% alpha content are specially processed to yield negligible extractable levels in the determination and identification of unknown sample materials. Pack of 100.

QL 1 Filters—Circular, Medium Retention (8–12 µm)

Prod. No.	Diameter (mm)	Comparable Grade
50651	42.5	1
50652	55	1
50653	70	1
50655	90	1
50656	110	1
50657	125	1
50658	150	1
50659	185	1

Filters, Quantitative (QT)

Hach® QT Filters are recommended for use in various *Hach Water Analysis Handbook Methods* and other environmental reference methods. Optimized ashless hardened circles provide an abrasion resistant smooth surface which is ideal for gravimetric procedures utilizing Büchner funnels and high vacuum. Pleated filters, increase flow rates by doubling the effective filtration area of the same diameter filter circle compared to quadrant folded filters. Available in a range of retention ratings, circle diameters, and pleated formats, Hach has a QT Filter that's right for your critical wet chemistry or environmental application. Pack of 100.

QT 40 Filters—Circular, Medium Retention (8-12 µm)

Prod. No.	Diameter (mm)	Comparable Grade
52651	42.5	40
52652	55	40
52653	70	40
52655	90	40
52656	110	40
52657	125	40
52658	150	40
52659	185	40

QT 42 Filters—Circular, Fine Retention (2–3 µm)

Prod. No.	Diameter (mm)	Comparable Grade
55351	42.5	42
55352H	55	42
55353	70	42
55355	90	42
55356	110	42
55357	125	42
55358	150	42
55359	185	42

QT 42P Filters—Pleated, Fine Retention (2–3 µm)

Prod. No.	Diameter (mm)	Comparable Grade
189457	125	42P
189458	150	42P
189459	185	42P
189460	240	42P

QT 45P Filters—Pleated, Medium-Slow Retention (3–5 µm)

Prod. No.	Diameter (mm)	Comparable Grade
69257	125	45P
69258	150	45P
69259	185	45P

QT 47 Filters—Circular, Fine-Slow Retention (1-2 µm)

Prod. No.	Diameter (mm)	Comparable Grade
2546259	185	47

Filters, SPE Oil & Grease for Clean, NPDES-type Samples

Xenosep® SPE Filters for EPA Method 1664A are designed to provide high recovery and low blank values in Horizon® SPE-DEX® and SPE Manifold applications. Chemically treated with a proprietary reverse phase adsorbent, single layer borosilicate glass Xenosep SPE Filters (47mm) can filter the 40 mg/L EPA PAR standard in approximately 10 minutes with significantly faster filtration times for 1 L NPDES-type samples. Xenosep SPE Filters offer high recoveries and low blanks at a great price.

Prod. No.	Description	Diameter	Unit
2947820	Xenosep SPE Filter	50 mm	50/pk
2947822	Xenosep SPE Filter	100 mm	50/pk
2947824	Prefilter	50 mm	50/pk
2947826	Prefilter	100 mm	50/pk

Horizon® and SPE-DEX® are registered trademarks of Horizon Technology, Inc

Filters, SPE Oil & Grease for Moderately Dirty Samples

Designed for moderately dirty samples, Xenomax™ Solid-Phase Extraction (SPE) Filters for *EPA Method 1664A* provide maximum recovery, speed and particulate loading capacity. Chemically treated with a proprietary reverse phase adsorbent, triple layer borosilicate glass Xenomax™ SPE Filters (47mm) can filter the 40 mg/L EPA PAR standard in approximately 20 seconds with similar filtration times for 1-L NPDES-type samples. Xenomax™ SPE Filters provide maximum analyte recovery, particulate loading capacity and processing speed when used with Xenosep® SPE Glassware.

Prod. No.	Description	Diameter	Pore Size	Unit
2943300	Xenomax SPE Filter	47 mm	1.0 µm	48/pk
2943301	Xenomax SPE Filter	47 mm	1.0 µm	24/pk
2948201	Xenomax SPE Filter	90 mm	1.0 µm	12/pk
2948202	Xenomax SPE Filter	95 mm	1.0 µm	12/pk
2514200	Prefilter, Glass Micro Fiber	45 mm	5.0 µm	48/pk
2514201	Prefilter, Glass Micro Fiber	83 mm	5.0 µm	12/pk

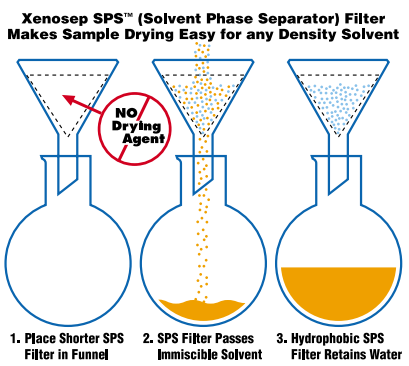
Filters, Soil Analysis (SA)

Designed for sandy soils, SA filters are conically folded and have been optimized for use with the common extraction solutions used in soil nutrient analysis (Mehlich 1, Mehlich 3, Morgan, Modified Morgan, Bray, and Olsen). SA Filters provide the best combination of retention rating, filtration speed and purity requirements for soil nutrient testing (P, K, Ca, Mg). 500/pack.

Prod. No.	Description	Diameter	Pore Size
2263356	SA – Conical Filter, Medium Retention for Sandy Soils	110 mm	8-12µm

Filters, Solvent Phase Separator

NEW!



FunnelFit® SPS™ (Solvent Phase Separator) filters are designed to quickly and easily remove water from the immiscible solvents used in Solid Phase Extraction (SPE) and Liquid-Liquid Extraction (LLE). Sample drying agents like sodium sulfate, which can dissolve through traditional filters and contaminate solvent extracts or have their water binding capacity exceeded, are no longer needed when this new EPA compliant technology is employed. The stabilized silicone treatment renders the cellulose filter hydrophobic which prevents water from passing through the filter under gravity while allowing immiscible organic solvents of any density to pass through. FunnelFit SPS filters are pre-folded into the shape of a cone that fits the funnel perfectly every time and feature consistently low background extractable/leachable levels. For best results, choose a diameter according to the chart below so that the top of the filter will fit at least 6mm (1/4") below the rim of the funnel. Pack of 100.

Prod. No.	Diameter	Fits Funnel I.D.
2516610	90 mm	55 mm
2516620	110 mm	65 mm
2516630	125 mm	75 mm
2516640	150 mm	90 mm

Filters, Thimbles, Soxhlet

NEW!

Xenosep® extraction thimbles are ideal for determining the concentration of nonvolatile and semivolatile organic compounds from environmental solid waste matrices, sludge, soil, air, and water. The thimbles are manufactured from high purity alpha cellulose cotton linters which provide excellent mechanical strength, stability, and retention with very low/no background extractables in a disposable, sample holder format.

Prod. No.	Size	Thickness	Unit
2966400	22 x 80 mm	1 mm	25/pk
2966500	25 x 80 mm	1 mm	25/pk
2966600	22 x 100 mm	1 mm	25/pk
2966700	33 x 80 mm	1 mm	25/pk
2966800	33 x 94 mm	1 mm	25/pk
2966900	43 x 123 mm	1 mm	25/pk

Filters, Total Suspended Solids (TSS)

TSS Filters are recommended for use in *Standard Methods 2540 C and 2540 D*. Optimized surface characteristics of this binderless borosilicate glass microfiber filter eliminates pin-holing and fiber-shedding to ensure consistent, accurate results. Fast flow rate, fine porosity and 1.5 µm particle retention makes the TSS Filter the preferred choice of environmental chemists for total suspended solids analysis of water and wastewater.

Prod. No.	Diameter (mm)	Unit
2198720	20	100/pk
2198725	25	100/pk
2198730	30	100/pk
253051	42.5	100/pk
253000	47	100/pk
253055	55	100/pk
253053	70	100/pk
2198755	90	100/pk
2569100	110	100/pk

Filters, Total Suspended Solids (TSS) AE Grade

Hach Grade AE filters are comparable to Pall Type A/E filters and the 47mm diameter is compatible with the magnetic filter holder #1352900. Filters feature fast flow rates, fine porosity and particle retention of 1.0µm which make them ideal for many dissolved and suspended solids testing procedures including Standard Methods 2540 C, 2540 D and 2540 E. This binder-free, borosilicate glass microfiber filter has a DOP efficiency of 99.98% (0.3µm) and a maximum operating temperature of 550°C in air.

Prod. No.	Diameter (mm)	Unit
2551450	21	100/pk
2551451	24	100/pk
2551452	25	100/pk
2551453	35	100/pk
2551454	37	100/pk
2551455	42.5	100/pk
2551456	47	100/pk
2551457	55	100/pk
2551458	70	100/pk
2551459	90	100/pk
2551460	102	100/pk
2551461	110	100/pk
2551462	125	100/pk
2551463	150	100/pk

Filters, Volatile Suspended Solids - 934-AH®

Hach 934-AH® Filters are specified for use in *Standard Methods 2540 C, 2540 D and 2540 E*. Fast flow rate, fine porosity and 1.5 µm particle retention have made this binderless borosilicate glass microfiber filter the accepted industry standard for over 50 years. Hach 934-AH® Filters can withstand temperatures over 500°C which is a unique and especially important feature for laboratories performing Fixed and Volatile Solids analysis of water and wastewater.

Prod. No.	Diameter (mm)	Unit
2511201	21	100/pk
2511202	24	100/pk
2511203	25	100/pk
2511204	35	100/pk
2511205	37	100/pk
2511206	42.5	100/pk
2511207	47	100/pk
2511208	55	100/pk
2511209	70	100/pk
2511210	90	100/pk
2511211	110	100/pk
2511212	125	100/pk
2511213	150	100/pk

934-AH is a registered trademark of Whatman, Inc. and used under license.

Filter Quick Reference Guide

Sterile Filters

Diameter (mm)	Pore Size (µm)	Material	Type	Gridded	Comparable Grade	Product Number	Units
47	0.2	Polyethersulfone	Circular, Gridded	Y	PES	**2618800**	200/pk
47	0.22	Mixed-Cellulose Ester	Circular, Gridded	Y	WME	**2916900**	600/pk
47	0.45	Mixed-Cellulose Ester	Circular, Gridded, Ind.	Y	WME	**2936100**	150/pk
47	0.45	Mixed-Cellulose Ester	Circular, Gridded, Ind.	Y	WME	**2936500**	600/pk
47	0.45	Mixed-Cellulose Ester	Circular, Gridded, Ind.	Y	WME	**1353001**	200/pk
47	0.45	Mixed-Cellulose Ester	Circular, Gridded, Ind.	Y	WME	**1353002**	1000/pk
47	0.45	Mixed-Cellulose Ester	Circular, Gridded, 10pk, w/pad	Y	WME	**2126900**	100/pk
47	0.45	Mixed-Cellulose Ester	Circular, Black, Gridded, Ind.	Y	WME	**2490300**	200/pk
47	0.45	Mixed-Cellulose Ester	Circular, Black, Gridded	Y	WME	**2915900**	600/pk
47	0.45	Mixed-Cellulose Ester	Circular, Gridded	Y	WME	**2916800**	600/pk
47	0.7	Mixed-Cellulose Ester	Circular, Gridded, Ind.	Y	WME	**2936200**	150/pk
47	0.7	Mixed-Cellulose Ester	Circular, Gridded, Ind.	Y	WME	**2936600**	600/pk

Non-Sterile Filters for Solid-Phase Extraction - Oil & Grease Testing

Diameter (mm)	Pore Size (µm)	Material	Type	Gridded	Comparable Grade	Product Number	Units
45	5.0	Glass Microfiber	Prefiliter - Circular, Extra Thick	-	-	**2514200**	48/pk
47	1.0	Glass Microfiber	Circular, Plain - Extra Thick	-	-	**2943300**	48/pk
47	1.0	Glass Microfiber	Circular, Plain - Extra Thick	-	-	**2943301**	24/pk
50	1.0	Glass Microfiber	Circular, Plain	-	-	**2947820**	50/pk
50	5.0	Glass Microfiber	Prefiliter - Circular, Plain	-	-	**2947824**	50/pk
83	5.0	Glass Microfiber	Prefiliter - Circular, Extra Thick	-	-	**2514201**	12/pk
90	1.0	Glass Microfiber	Circular, Plain - Extra Thick	-	-	**2948201**	12/pk
95	1.0	Glass Microfiber	Circular, Plain - Extra Thick	-	-	**2948202**	12/pk
100	1.0	Glass Microfiber	Circular, Plain	-	-	**2947822**	50/pk
100	5.0	Glass Microfiber	Prefiliter - Circular, Extra Plain	-	-	**2947826**	50/pk

Filter Quick Reference Guide continued on next page.

Filter Quick Reference Guide

Non-Sterile Filters

Diameter (mm)	Pore Size (µm)	Material	Type	Gridded	Comparable Grade	Product Number	Units
20	1.5	Glass Microfiber	Circular, Plain	-	934-AH® <500°C	**2198720**	100/pk
21	1.0	Glass Microfiber	Circular, Plain	-	A/E	**2551450**	100/pk
21	1.2	Glass Microfiber	Circular, Plain	-	GF/C	**2551600**	100/pk
21	1.5	Glass Microfiber	Circular, Plain	-	934-AH® >500°C	**2511201**	100/pk
24	1.0	Glass Microfiber	Circular, Plain	-	GF/B	**2215500**	100/pk
24	1.0	Glass Microfiber	Circular, Plain	-	A/E	**2551451**	100/pk
24	1.5	Glass Microfiber	Circular, Plain	-	934-AH® >500°C	**2511202**	100/pk
25	0.2	Polycarbonate	Circular, Black	-	Cyclopore® - Nuclepore®	**2387200**	100/pk
25	0.45	Mixed-Cellulose Ester	Circular, Plain	-	ME 25	**2209525**	25/pk
25	0.45	Mixed-Cellulose Ester	Circular, Plain	-	ME 25	**2514103**	100/pk
25	1.0	Glass Microfiber	Circular, Plain	-	A/E	**2551452**	100/pk
25	1.5	Glass Microfiber	Circular, Plain	-	934-AH® <500°C	**2198725**	100/pk
25	1.5	Glass Microfiber	Circular, Plain	-	934-AH® >500°C	**2511203**	100/pk
30	1.5	Glass Microfiber	Circular, Plain	-	934-AH® <500°C	**2198730**	100/pk
35	1.0	Glass Microfiber	Circular, Plain	-	A/E	**2551453**	100/pk
35	1.5	Glass Microfiber	Circular, Plain	-	934-AH® >500°C	**2511204**	100/pk
37	1.0	Glass Microfiber	Circular, Plain	-	A/E	**2551454**	100/pk
37	1.5	Glass Microfiber	Circular, Plain	-	934-AH® >500°C	**2511205**	100/pk
42.5	1.0	Glass Microfiber	Circular, Plain	-	A/E	**2551455**	100/pk
42.5	1.5	Glass Microfiber	Circular, Plain	-	934-AH® <500°C	**253051**	100/pk
42.5	1.5	Glass Microfiber	Circular, Plain	-	934-AH® >500°C	**2511206**	100/pk
42.5	2 - 3	Cellulose	Circular, Plain	-	42	**55351**	100/pk
42.5	8 - 12	Cellulose	Circular, Plain	-	1	**50651**	100/pk
42.5	8 - 12	Cellulose	Circular, Plain	-	40	**52651**	100/pk
47	0.45	Mixed-Cellulose Ester	Circular, Plain	-	WME	**1353000**	100/pk
47	0.45	Mixed-Cellulose Ester	Circular, Gridded	Y	WME	**2618901**	100/pk
47	0.7	Glass Microfiber	Circular, Plain	-	GF/F	**2676600**	100/pk
47	0.7	Glass Microfiber	Circular, Plain	-	GF/F	**2513801**	100/pk
47	1.0	Glass Microfiber	Circular, Plain	-	GF/B	**2551400**	100/pk
47	1.0	Glass Microfiber	Circular, Plain - Extra Thick	-	-	**2842100**	100/pk
47	1.0	Glass Microfiber	Circular, Plain	-	A/E	**2551456**	100/pk
47	1.5	Glass Microfiber	Circular, Plain	-	934-AH® <500°C	**253000**	100/pk
47	1.5	Glass Microfiber	Circular, Preweighed	-	-	**2546100**	100/pk
47	1.5	Glass Microfiber	Circular, Plain	-	934-AH® >500°C	**2511207**	100/pk
55	1.0	Glass Microfiber	Circular, Plain	-	A/E	**2551457**	100/pk
55	1.5	Glass Microfiber	Circular, Plain	-	934-AH® <500°C	**253055**	100/pk
55	1.5	Glass Microfiber	Circular, Plain	-	934-AH® >500°C	**2511208**	100/pk
55	2 - 3	Cellulose	Circular, Plain	-	42	**55352H**	100/pk
55	8 - 12	Cellulose	Circular, Plain	-	1	**50652**	100/pk
55	8 - 12	Cellulose	Circular, Plain	-	40	**52652**	100/pk
70	1.0	Glass Microfiber	Circular, Plain	-	A/E	**2551458**	100/pk
70	1.5	Glass Microfiber	Circular, Plain	-	934-AH® <500°C	**253053**	100/pk
70	1.5	Glass Microfiber	Circular, Plain	-	934-AH® >500°C	**2511209**	100/pk
70	2.7	Glass Microfiber	Circular, Plain	-	GF/D	**2164300**	100/pk
70	2 - 3	Cellulose	Circular, Plain	-	42	**55353**	100/pk
70	8 - 12	Cellulose	Circular, Plain	-	1	**50653**	100/pk
70	8 - 12	Cellulose	Circular, Plain	-	40	**52653**	100/pk
90	1.0	Glass Microfiber	Circular, Plain	-	A/E	**2551459**	100/pk
90	1.5	Glass Microfiber	Circular, Plain	-	934-AH® <500°C	**2198755**	100/pk
90	1.5	Glass Microfiber	Circular, Plain	-	934-AH® >500°C	**2511210**	100/pk
90	2 - 3	Cellulose	Circular, Plain	-	42	**55355**	100/pk
90	8 - 12	Cellulose	Circular, Plain	-	1	**50655**	100/pk
90	8 - 12	Cellulose	Circular, Plain	-	40	**52655**	100/pk
102	1.0	Glass Microfiber	Circular, Plain	-	A/E	**2551460**	100/pk
110	1.0	Glass Microfiber	Circular, Plain	-	A/E	**2551461**	100/pk
110	1.5	Glass Microfiber	Circular, Plain	-	934-AH® <500°C	**2569100**	100/pk

Filter Quick Reference Guide

Non-Sterile Filters (continued)

Diameter (mm)	Pore Size (µm)	Material	Type	Gridded	Comparable Grade	Product Number	Units
110	1.5	Glass Microfiber	Circular, Plain	-	934-AH® >500°C	**2511211**	100/pk
110	2 - 3	Cellulose	Circular, Plain	-	42	**55356**	100/pk
110	8 - 12	Cellulose	Circular, Plain	-	1	**50656**	100/pk
110	8 - 12	Cellulose	Circular, Plain	-	40	**52656**	100/pk
110	8 - 12	Cellulose	Cone, Prefolded	-	SA 720F	**2263356**	500/pk
125	1.0	Glass Microfiber	Circular, Plain	-	A/E	**2551462**	100/pk
125	1.5	Glass Microfiber	Circular, Plain	-	934-AH® >500°C	**2511212**	100/pk
125	2 - 3	Cellulose	Circular, Plain	-	42	**55357**	100/pk
125	2 - 3	Cellulose	Pleated (Folded)	-	42	**189457**	100/pk
125	3 - 5	Cellulose	Pleated (Folded)	-	42	**69257**	100/pk
125	8 - 12	Cellulose	Circular, Plain	-	1	**50657**	100/pk
125	8 - 12	Cellulose	Circular, Plain	-	40	**52657**	100/pk
150	1.0	Glass Microfiber	Circular, Plain	-	A/E	**2551463**	100/pk
150	1.5	Glass Microfiber	Circular, Plain	-	934-AH® >500°C	**2511213**	100/pk
150	2 - 3	Cellulose	Circular, Plain	-	42	**55358**	100/pk
150	2 - 3	Cellulose	Pleated (Folded)	-	42	**189458**	100/pk
150	3 - 5	Cellulose	Pleated (Folded)	-	42	**69258**	100/pk
150	8 - 12	Cellulose	Circular, Plain	-	1	**50658**	100/pk
150	8 - 12	Cellulose	Circular, Plain	-	40	**52658**	100/pk
185	1.5	Cellulose	Circular, Plain	-	-	**2546259**	100/pk
185	2 - 3	Cellulose	Circular, Plain	-	42	**55359**	100/pk
185	2 - 3	Cellulose	Pleated (Folded)	-	42	**189459**	100/pk
185	3 - 5	Cellulose	Pleated (Folded)	-	42	**69259**	100/pk
185	8 - 12	Cellulose	Circular, Plain	-	1	**50659**	100/pk
185	8 - 12	Cellulose	Circular, Plain	-	40	**52659**	100/pk
240	2 - 3	Cellulose	Pleated (Folded)	-	42	**189460**	100/pk

Filter Capsules & Holders

Diameter (mm)	Pore Size (µm)	Material	Type	Gridded	Comparable Grade	Product Number	Units
33	0.2	Nylon	Syringe	-	-	**2513605**	50/pk
33	0.22	PVDF	Syringe	-	-	**2513601**	50/pk
33	0.45	PVDF	Syringe	-	-	**2513603**	50/pk
33	0.22	PES	Syringe, Sterile		-	**2513700**	50/pk
25	0.2	Polysulfone	Syringe, Sterile		-	**2415600**	each
47	0.45	Mixed-Cellulose Ester	Filter Funnel Unit, Sterile	Y	-	**2586300**	72/pk
47	0.45	Mixed-Cellulose Ester	Filter Funnel Unit, Sterile	Y	-	**2508900**	24/pk
47	0.45	Mixed-Cellulose Ester	Filter Funnel Unit, Sterile	Y	-	**2831500**	50/pk
47	0.45	Mixed-Cellulose Ester	Filter Funnel Unit, Sterile	Y	-	**2619000**	50/pk
47	0.45	Cellulose Nitrate	Filter, Funnel, Petri Dish, Sterile	Y	-	**2521100**	48/pk
47	0.45	Cellulose Nitrate	Filter, Funnel, Petri Dish, Sterile	Y	-	**2521101**	48/pk
47	0.45	Cellulose Nitrate	Filter, Funnel, Petri Dish, Sterile	Y	-	**2521102**	48/pk
680	0.45	Polysulfone	In-line Filter	-	-	**2670500**	each
640	0.45	Acrylic-copolymer	In-line Filter	-	-	**2841910**	10/pk
22 x 80	10	Cellulose	Thimble, Soxhlet	-	-	**2966400**	25/pk
25 x 80	10	Cellulose	Thimble, Soxhlet	-	-	**2966500**	25/pk
22 x 100	10	Cellulose	Thimble, Soxhlet	-	-	**2966600**	25/pk
33 x 80	10	Cellulose	Thimble, Soxhlet	-	-	**2966700**	25/pk
33 x 94	10	Cellulose	Thimble, Soxhlet	-	-	**2966800**	25/pk
43 x 123	10	Cellulose	Thimble, Soxhlet	-	-	**2966900**	25/pk

Filtration Assemblies

Filter, Analytical Unit, Type A

Certified for water quality work, this sterile, disposable, polystyrene filter unit contains a 47 mm, 0.45 µm cellulose nitrate membrane for superior recovery and growth of microorganisms. It offers good chemical resistance to dilute acids, aromatic and aliphatic hydrocarbons, and conforms to American Public Health Association (APHA) and Standard Methods. Filter unit holder is available for use in multiple filtrations.

Prod. No.	Description	Unit
2656600	Filter Unit	12/pk

Filter Apparatus, OriFlo™

Designed for rapid, qualitative filtration of particulate matter from aqueous samples using a 25 mm glass fiber filter or other medium with porosity ≥ 1.0 µm (micron). Used in Hach Method 10014 for Ultra Low Range Chlorine in Wastewater (EPA Accepted method).

Prod. No.	Description	Unit
4966000	OriFlo Filter Apparatus.	each
2676700	Glass Fiber Filter; extra thick; 1 µm; 25 mm	100/pk
2594025	Versapor Disc Filter; 3 µm; 25 mm	25/pk

Filtering Funnel Assembly

Three-piece reservoir, base and stem made of borosilicate glass. Ground contact flanges with clamps for leak-tight seal. Supplied with acrylic filter support plate. Additional PTFE support plate (2164200) needed for acid and neutral detergent fiber tests.

Prod. No.	Description	Unit
2164100	Funnel, 7 cm	each
2164200	PTFE Support Plate	each
2164300	Glass Fiber Filter Paper, 100/pk, 70 mm	each

Filtration Assemblies, Glass

25 mm vacuum microfiltration assembly designed to produce ultra clean filtrate from small volumes of viscous solutions, or for microbiological analysis. Prefilter size is 16 mm diameter and the approximate filter area is 2.5 cm^2. Unit is supplied with a 316 stainless steel support screen, PTFE support screen gasket, glass support base, 15 mL graduated funnel (5-15 mL; 1 mL increments), anodized aluminum clamp, stainless steel support, and a #5 silicone stopper. Filtering flask sold separately. See pages 345-346 for filter options.

Prod. No.	Description	Unit
2386500	Microfiltration Assembly; 25 mm	each
54643	125 mL glass filtering flask; OD sidearm = 7.9 mm (5/16")	each

Filtration Assemblies, Graduated Glass

Beaker-style funnel (500 mL) with 47 mm membrane support for filtration of aqueous samples. Fritted borosilicate glass membrane support for even filtration across surface of membrane. Funnel attaches evenly to base via aluminum clamp. Filter flask sold separately.

Prod. No.	Description	Unit
234000	Glass Filtration Apparatus	each

Polysulfone Filter Holder

With 250 mL graduated receiver to eliminate need for a manifold and/or vacuum flask. For use with 47 or 50 mm filters under vacuum or pressure. Autoclavable.

Prod. No.	Description	Unit
2254400	Polysulfone Filter Holder	each

Filter Holder, Magnetic, 47 mm

Made of rugged, autoclavable polyphenylsulfone. Magnetic, no-leak seal allows one-hand operation for filter retrieval. Support screen included. Graduated funnel: 300 mL (50 mL increments). Stem fits #8 stopper (not included).

Prod. No.	Description	Unit
1352900	Magnetic Polyphenylsulfone Filter Holder	each

PALL MicroFunnel™ Manifold

Single-place vacuum manifold. Designed for use with PALL's MicroFunnel filter units (see Filtration Funnels). Aluminum body with stainless steel hose barb connection. Small footprint and height create a portable unit that is easily stored. Corrosion and chemically resistant. Autoclavable.

Prod. No.	Description	Unit
2831600	MicroFunnel single-place manifold	each

PALL Filter Funnel Manifolds

Feature 3-place filtration with independent vacuum control. Accepts 25 or 47 mm filter funnels for processing multiple samples simultaneously. Designed for efficient analysis of microbiological or particulate contamination.
Aluminum: Anodized aluminum body; chrome-plated brass valves; stainless steel drain plugs. Autoclavable. Dimensions (D x W x H) - 6 x 16 x 6.25"
Polyurethane: High-impact polyurethane body; glass-filled polypropylene valves; nylon drain plugs. Dimensions (D x W x H) - 4 x 11 x 6"

Prod. No.	Description	Unit
2486100	Aluminum Filter Funnel Manifold	each
2486150	Polyurethane Filter Funnel Manifold	each

HACH® Be Right™
800-227-4224
Outside the United States, call 970-669-3050

Finger Cot, Zetex

Protect fingers from hot surfaces. Great when gloves are too bulky for the job. Non-asbestos material.

Prod. No.	Unit
1464702	2/pk

Flask, Digesdahl®

Specially designed flat-bottom glass flask for use with the Hach Digesdahl® Digestion Apparatus. Each flask is calibrated individually with a 100 mL (to contain) mark.

Prod. No.	Unit
2312542	each

Flask, Distillation

Designed for use with the General Purpose Distillation Apparatus. Round bottom, 500 mL capacity. Long neck with branch and thermometer port. Neck extends 90 mm above flask body and branch extends 150 mm above flask body. Both neck and branch have 20-400 screw-thread finish. Thermometer port has 13-425 screw-thread finish.

Prod. No.	Unit
2264649	each

Flask, Erlenmeyer

Graduated glass flask with narrow mouth and heavy-duty rim. Durable graduations indicate approx. volume.

Stopper not included—see pages 377-378.

Prod. No.	Capacity (subdivisions)	Stopper Size	Pkg
50540	25 mL (5 mL)	0	each
50541 **50571**	50 mL (10 mL)	1	each 12
50543 **50573**	125 mL (25 mL)	5	each 12
50546 **50576**	250 mL (25 mL)	6	each 12
50547	300 mL (25 mL)	6	each
50549	500 mL (50 mL)	7	each
50553	1000 mL (50 mL)	9	each
50554	2000 mL (100 mL)	10	each

Flask, Erlenmeyer, Wide-Mouth

Graduated glass flask with wide mouth for easier titrations. Reinforced tops with round finish provide maximum strength. Durable graduations indicate approx. volume.

Stopper not included—see pages 377-378.

Prod. No.	Capacity (subdivisions)	Stopper Size	Pkg
2489443	125 mL (50 mL)	6	each
2489446	250 mL (50 mL)	8	each
2489449	500 mL (100 mL)	10	each
2489453	1000 mL (250 mL)	11	each
2489454	2000 mL (600 mL)	6	each

Flask, Filtering, Glass

Glass filtering flask with side-arm at 90° angle. Heavy-walled with graduated capacity scale. Designed to ASTM E1406, Type II, Class I requirements. Hose connection accepts 5/16" I.D. flexible tubing.

Stopper not included—see pages 382-383 for tubing, see pages 377-378 for stopper.

Prod. No.	Capacity (graduation range)	Stopper Size	Pkg
54643	125 mL (50-125 mL)	5	each
54649	500 mL (150-500 mL)	7	each
54679	500 mL (150-500 mL)	7	6
54653	1000 mL (300-1000 mL)	8	each
54683	1000 mL (300-1000 mL)	8	6

Flask, Graduated Glass with Screw Cap Top

Graduated glass flask with plastic screw cap. Excellent choice for media preparation, mixing solutions, and culturing. Inert rubber liner cemented into cap and completely autoclavable. Durable graduations indicate approximate volume.

Prod. No.	Capacity (subdivisions)	Pkg	Replacement Cap (thread finish)	Pkg
2089641 **2089671**	50 mL (10 mL)	each 6		
2089643 **2089673**	125 mL (25 mL)	each 6		
2089646 **2089676**	250 mL (25 mL)	each 6	**2615206** (38-430)	6
2089649 **2089679**	500 mL (50 mL)	each 6	**2615206** (38-430)	6
2089653 **2089683**	1000 mL (50 mL)	each 6	**2615206** (38-430)	6

Flask, Filtering, Polypropylene

Polypropylene filtering flask with side-arm at 45° angle prevents tipping. Barbed side-arm accepts 1/4-3/8" I.D. tubing for application of vacuum.

See pages 382-383 for tubing, see pages 377-378 for stopper.

Prod. No.	Capacity	Stopper Size	Pkg
2089949	500 mL	7	each
2089953	1000 mL	8	each

Flask, Polymethylpentene

Polymethylpentene flask with polypropylene screw cap features clarity, chemical resistance, strength, and autoclavability (Do not engage threads during cycle). Useful for titrations, preparation and storage of media.

Prod. No.	Capacity	Pkg
2089843 **2089873**	125 mL	each 6
2089876	250 mL	4
2089879	500 mL	4

Flask, Polypropylene

Polypropylene flask for general laboratory use. Rugged, excellent chemical resistance, and autoclavable.

Stopper not included—see pages 377-378 for stopper.

Prod. No.	Capacity (subdivisions)	Stopper Size	Pkg
108243 **108273**	125 mL	3	each 12
108246 **108276**	250 mL	6	each 6

Flask, Volumetric, Class A

Calibrated "To Contain" and manufactured to ASTM E438, "Glass in Laboratory Apparatus" requirements. Stopper included.

Prod. No.	Capacity (tolerance)	Stopper Size	Pkg
1457440	25 mL (±0.03 mL)	9	each
1457441	50 mL (±0.05 mL)	9	each
1457442	100 mL (±0.08 mL)	13	each
1457445	200 mL (±0.1 mL)	16	each
1457446	250 mL (±0.12 mL)	16	each
1457449	500 mL (±0.2 mL)	19	each
1457453	1000 mL (±0.3 mL)	22	each

Flask, Volumetric, Certified Class A

Individually serialized glass flask supplied with Certificate of Graduation Accuracy and traceable to NIST Standards. Class A tolerances meet requirements of ASTM E438 and ASTM E288. Graduation ring on neck of flask.

Supplied with ground glass stopper.

Prod. No.	Capacity (tolerance)	Stopper Size	Pkg
2636642	100 mL (0.08 mL)	13	each
2636646	250 mL (0.12 mL)	16	each
2636649	500 mL (0.20 mL)	19	each
2636653	1000 mL (0.30 mL)	22	each
2636654	2000 mL (0.50 mL)	27	each

Flask, Volumetric, Polymethylpentene

Durable polymethylpentene flask with polypropylene screw-top closure. Calibrated "to contain/deliver" at 20°C.

Prod. No.	Capacity (tolerance)	Pkg
2099542	100 mL (0.16 mL)	each
2099546	250 mL (0.24 mL)	each
2099549	500 mL (0.40 mL)	each
2099553	1000 mL (0.60 mL)	each

Flask, Volumetric, Polypropylene

Polypropylene flask and screw cap. Durable with excellent chemical resistance, with the same accuracy as glass. Permanent color graduation line with marking spot. Calibrated "to contain/deliver" at 20°C. The 200/203 capacity flask has dual marks useful in DO determination via Winkler Titration.

Prod. No.	Capacity (tolerance)	Pkg
1406041	50 mL (±0.10 mL)	each
1406042	100 mL (0.16 mL)	each
1406049	500 mL (0.40)	each
1406053	1000 mL (0.60 mL)	each

Floc Jar, Wagner Type

Clear plexiglass, square jar with sample delivery port for monitoring flocculation. Measures 21 x 12.7 x 12.7 cm (8.3 x 5 x 5"), with a capacity of 2 L. Suitable for use with six-unit gang Phipps & Bird or similar floc testing apparatus. Includes tubing, stopper, clamp, and 50 mL graduated beaker.

Prod. No.	Description	Unit
4117000	Floc Jar, Wagner	each
1480474	Stopper, replacement	each
2087901	Clamp	12/pk

Forceps, Cross-Action Design

Stainless steel, autoclavable. Cross-action design for holding membrane without applying constant pressure.

Prod. No.	Unit
2387300	each

Forceps, Rounded Tips

Stainless steel, autoclavable. Tips are rounded to prevent damage. Easy to use because of slip-proof plastic finger grips.

Prod. No.	Unit
2141100	each

Funnel, Analytical Long Stem, Polypropylene

Standard long stem funnel meets the needs of a wide variety of applications. Mounded ribbing prevents "air lock" commonly occurring during funneling and filtrations. A steep, 58-degree cone slope makes for fast and easy flow of either liquids or small solids. Polypropylene construction is resistant to chemicals and makes this funnel fully autoclavable for sterilization.

Prod. No.	Top I.D. Filter Paper Diam.	Approx. Volume	Stem Length Stem O.D.	Unit
108367	66 mm /110 mm	65 mL	65 mm / 7 mm	each
108368	77 mm / 125 mm	114 mL	80 mm / 7 mm	each
108370	104 mm / 185mm	254 mL	99 mm / 9 mm	each

Funnels — Face Shield

Funnel, Buchner, Porcelain

Durable porcelain construction is tough, inert and highly chemical resistant. Molded-in perforated filter plate. Fully autoclavable.

Prod. No.	Top I.D. Filter Paper Diam.	Approx. Volume	Height	Unit
55075	43 mm / 30-40 mm	30 mL	89 mm	each
55085	56 mm / 50-55 mm	87 mL	101 mm	each
55068	83 mm / 70 mm	186 mL	143 mm	each
55087	100 mm / 90 mm	320 mL	160 mm	each
55095	126 mm / 110-124 mm	700 mL	202 mm	each

Funnel, Buchner, Polypropylene

Light weight and durable polypropylene construction with a removable filter plate for easy cleaning, chemical resistant. Fully autoclavable. Stopper sold separately.

Prod. No.	Top I.D. Filter Paper Diam.	Approx. Volume	Stem Length Stem O.D.	Unit
2090553	76 mm / 70 mm	186 mL	65 mm / 11 mm	each
2090556	130 mm / 110 mm	919 mL	93 mm / 22 mm	each

Funnel, Micro, Polypropylene

Ideal for micro work, filling burets, manometers, and small bottles. Steam autoclavable at 250°F (121°C).

Prod. No.	Top I.D.	Stem Diameter	Unit
2584335	35 mm	8 mm	each

Funnel, Powder

Polypropylene funnel for easy transfer of powders into narrow-necked flasks, tubes or vials.

Prod. No.	Top I.D.	Stem O.D.	Stem Dia.	Unit
2264467	65 mm	15 mm	25 mm	each
2264472	150 mm	28 mm	30 mm	each

Funnel, Separatory, Glass

Pear-shaped (Squibb) separatory funnel with Teflon stopcock. Clear glass body allows for easy detection of layers between immiscible liquids, all the way to the stopcock. Highly chemical resistant and fully autoclavable. High density linear polyethylene stopper with closed bottom included.

Prod. No.	Capacity	Stopcock Size	Neck Size	Unit
52046	250 mL	4	22 mm	each
52049	500 mL	4	27 mm	each

Funnel, Separatory, Polypropylene

The most economical answer to more expensive and fragile glass funnels. Polypropylene, pear-shaped (Squibb) with TFE stopcock and polypropylene screw top closure. Translucent body allows for easy detection of layers between immiscible liquids, all the way to the stopcock. TFE stopcock and housing eliminate need for lubrication, possibility of contamination. Resist virtually all chemicals, including hydrofluoric acid. Autoclavable except for stopcock assembly, which is easily removed. Stopcock assembly may be chemically disinfected. Stem length 65 mm.

Prod. No.	Capacity	Closure Size	Unit
1406149	500 mL	43 mm	each

Face Shield, Polycarbonate

Fully adjustable head straps with padded brow provides comfort, while 15" wide x 8 1/2" tall polycarbonate shield provides outstanding splash protection. Shield also provides 99.9% UV protection up to 380nm. Forehead cover and ledge design prevents fluids from splashing inside the window. Removable, steam autoclavable face shield. Meets ANSI Z87+ and CSA Z94.3 standards. Some Assembly Required.

Prod. No.	Description	Unit
2928101	Polycarbonate Face Shield	each