■ Dust-Off® Plus



pressurized cleaner with multidirectional nozzle

no CFC's, HCFC's

Flammable - 100% Ozone-Safe. M H→F Export: By Air Cargo or U.P.S. Ground.

81500 Dust-Off Plus, 10 oz. can with valveeach 81505 Dust-Off Plus refills. 10 oz. each

81504 Dust-Off Plus valve only .each

■ Disposable Precision **Duster**



pressurized cleaner

100% HFC's. No CFC's, no HCFC's. Nonflammable, no residue, moisture-free, nonabrasive, odorless. Zero ozone depletion potential. 10 ounce aerosol. Noncorrosive. Safe on most plastics. M H→F

81600 Precision Duster, 10 oz. .each

 $\mathbf{M} = \mathsf{MSDS}$ on web page

Phone: 800-237-3526

■ High Velocity Precision ■ GUST Easy Duster **Dusters**



360° pressurized cleaner

100% HFC's. No CFC's, no HCFC's. Nonflammable, no residue, moisture-free, nonabrasive, odorless, quad filtered. Inert and non-ozone depleting. 10 ounce (236ml) and 8 ounce (187ml) canisters. The "360°" canister can be inverted while spraying. M H◆F

81400 High Velocity Duster, 10 oz. each 81405 High Velocity Duster, 8 oz. each

■ GUST Spray Anyway 360° Duster



"any angle" pressurized cleaner

GUST 360° Spray Anyway Duster lets you spray from any angle - even upside downwithout frosting. Contains Dustex 11, a 100% ozone safe, non-abrasive, inert, moisture-free, ultra clean gas for precision cleaning. Suitable for removing dust, lint and particulates from microscoples, cameras, precision parts, electronic equipment and other delicate parts from any angle. Delivers up to 80 psi blasts. 8 oz. (187ml) canister. M H→F

81410 GUST Spray Anyway 360° Duster, 8 oz. each



pressurized cleaner

Nonflammable, ultra-clean, no residue, moisture-free gas for removing dust and other particulates from samples, microscopy slides, lenses, film, optical instruments, electronic parts, etc. in laboratory, service and manufacturing applications with jets of pin-pointed gas. Contains Dustex 8, a 100% ozone safe, ultra-pure gas. Delivers up to 70 psi blasts. Large 12 oz. (283 ml) container for more cleaning action. M H-F

81710 GUST Easy Duster, 12 oz. each

Clean Jet 100 **Dust Remover**



pressurized cleaner

Nonflammable, ultra-filtered, no residue, ultra clean gas for precision removal of dirt, dust, lint and particulates. Suitable for delicate electronic devices, photographic equipment, microscopes, clean rooms and laboratories. Delivers up to 100 PSIA at 20°C (68°F). No HCFC's or CFC's. Net weight 284g (10 oz.). M H → F

81700-01 Clean Jet 100 Dust Remover, 10 oz. each



Compressed Air Nozzles; Polishing and Cleaning Compounds

■ Compressed Air Gun and Accessories



800 Pistol Grip Nozzle and 804 Assortment, 5 Air Nozzle Tips, pkg/5

Can be used with dry compressed air or nitrogen. If a dry nitrogen line is available in the lab, use this air gun to blow away dust particles.

Pistol Grip Nozzle

Great for all around use, gun has a hang-up hook and brass safety tip with vents to let air escape.

This air gun meets OSHA requirement 1910.242 (b) directive 100-1 when used with this safety tip. The trigger control lets you vary airflow from a puff to a blast. Body is polished die cast aluminum with a nonslip vinyl surface pistol grip.

Specifications:

- Air inlet: 1/4" NPT Female with Male adapter attached
- Maximum Pressure: 150 psi
- Air consumption 20 cfm @ 100 psi
- Air outlet: 1/8" NPT Female with safety nozzle attached



803 Flex Air Hose, extremely flexible, 10' long, Nylon-covered braided air hose with ¼" NPT female ends.

Product No. 804 Assortment, 5 Air Nozzle Tips

The ½" NPT Male end screws directly into Pistol Grip Nozzle to deliver a precision stream of air directly to your specimen.

The gauges of the nozzles are as follows:

Needle	N	ominal O.	D.	l l	Iominal I.E) .
Gauge	mm	inches	tol. (in.)	mm	inches	tol. (in.)
10 .	3.404	0.134	-0.0010	2.692	0.106	-0.0020
13	2.413	0.095	"	1.803	0.071	"
15	1.829	0.072	-0.0005	1.372	0.054	-0.0015
18	1.27	0.05	"	0.838	0.033	"
19	1.067	0.042	"	0.686	0.027	"

800	Pistol Grip Nozzleeach
803	Flex Air Hose, 3m (10 ft.)each
804	Assortment, 5 Air Nozzle Tips each

M = MSDS on web page

■ Mini In-Line Desiccant Dryer/Filter



Turns wet dirty air into clean dry air with a four stage filter. 1st stage removes dirt, 2nd stage removes oil vapors, 3rd stage removes water vapor,

and 4th stage removes residual desiccant dust.

Specifications:

- Housing Material: Polycarbonate allows clear desiccant visibility
- Guard Material: Nylon
- Max Flow Capacity: 15 cfm
- Max Pressure: 125 psi
- Max Temperature: 130° F (54°C) (WARNING: This device will
 collect moisture which could freeze and rupture the unit if used
 below 32°F [0°C].)
- Connections: ¼" NPT/PTF (Hand tighten to a leakproof seal. Do not use any mechanical means to hold the dryer/filter and do not over-torque the threads.)
- Dew Point: 40 °F (4.4°C)
- Dimensions: 3-3/4" long x 1-11/16" diameter (95 x 43mm)
- Weight: 2.8oz. (80g)

800-10 Mini In-Line Desiccant Dryer/Filter each

Pikal Paste



Can be used to remove "hard" stains on metal, glass and enamels. Also used for precision polishing of parts with a narrow tolerance. Can be used on buffing wheels. Widely used to clean electron microscopes, ion beam systems, vacuum systems, deposition sources and stainless steel chambers. Can be applied

to wipes or cotton swabs for polishing. Test first when used on softer materials such as copper, aluminum and soft metal alloys.

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893-10 Pikal Polishing Paste, 250 gram tin each

Pikal Care



Pikal Care is formulated as a thinner paste, supplied in a tube and is specially suitable for stainless steel products and surfaces. Can be supplied directly on the products and polished with wipes.

893-20 Pikal Care Polishing Paste, 250 gram tube . . .each

Pikal Liquid



Pikal Liquid is an emulsion for gentler polishing of a wide variety of materials such as brass, stainless steel, copper, aluminum and plated surfaces both with flat and curved surfaces. Pikal liquid is supplied in a can and the emulsion may be applied directly on the product to be polished or via a polishing wipe.

893-30 Pikal Liquid Polishing Emulsion,

300 gram can each

Polishing and Cleaning Compounds; Wipes



Glaster Polish

Glaster Polish by Pikal is formulated as a gentle cleaning/polishing product for cleaning glass, tiles, gold/silver products or gold/silver plated products and porcelain. Glaster is supplied in a can and may be applied directly on the product to be polished or via a polishing wipe.

893-40 Glaster Cleaning/Polishing Emulsion, 300 gram can each



■ Wenol® Metal Polish

Wenol® is widely used as a

cleaner and polish for electron microscope applications, ion beam systems, vacuum coating systems and general lab applications. Originally formulated for use on hard metal surfaces such as stainless steel. The carrier fluid dissolves in most hydrocarbons and is easily removed. Wenol® is petroleum based and does not contain silicones. It is not recommended for use on soft metal such as aluminum. Same manufacturer as for POL (discontinued).

892 Wenol® Metal Polish, 100ml each



■ Unipol® Metal Polish

Many users of POL (discon-

tinued) have switched to UNIPOL® and have found that UNIPOL® will give the same performance as POL. It is widely used as a cleaner and polish for electron microscopes, ion beam systems, vacuum coating systems, substrates and general lab applications. UNIPOL® has been formulated to give optimum results on hard metal surfaces such as stainless steel or chromium coated surfaces. It performs very well as a cleaning polish for Wehnelt cylinders. UNIPOL® is petroleum based, does not contain silicones and dissolves in most hydrocarbons. It is not recommended for use on soft metal such as aluminum. M

818 Unipol® Metal Polish, 50ml each



■ Twill-Jean Cleaning Cloths

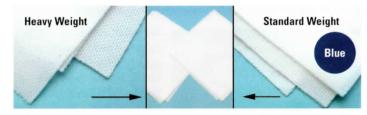
the most popular EM cleaning cloth Lintless, pure cotton, cut on a bias. For sen-

sitive EM polishing and cleaning applications

Phone: 800-237-3526

SILIVE LI	vi polistiling and cicariing applications.
812-1	Twill-Jean Cleaning Cloths, Cotton,
	10.2 x 10.2CM (4" x 4")pkg/300
812-1	5 Twill-Jean Cleaning Cloths, Cotton,
	15.2 x 15.2CM (6" x 6") pkg/300
812-2	Twill-Jean Cleaning Cloths, Cotton,
	22.9 x 22.9CM (9" x 9")
812	Twill-Jean Cleaning Cloths, Cotton,
	22.9 x 22.9cm (9" x 9")
812-6	Twill-Jean Cleaning Cloths, Cotton,
	43.2 x 43.2cm (17" x 17") pkg/75

Purity Wipes



Note: Insets are enlarged to show fabric detail

The standard Purity Wipes are Class 10 clean room compatible wipes comprised of 100% continuous polyester fiber that is especially clean and highly absorbent. The knit construction has been developed to insure the greatest product integrity and cleaning performance. Laundered to reduce particle generation and soluble extracts. Absorbency exceeds 200%. Basis Weight 105g/m². Color: white or blue.

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Heavy Weight Purity Wipes

Heavy duty Purity Wipe which is also class 10 clean room compatible, similar fiber and knot but has a higher absorbance and is more durable than the standard Purity Wipes. Basis Weight 137g/m². Color: white.

81231	Purity Wipes, White, Heavy Weight,
	10.2 x 10.2cm (4" x 4")
81232	Purity Wipes, White, Heavy Weight,
	15.2 x 15.2cm (6" x 6")
81233	Purity Wipes, White, Heavy Weight,
	22.9 x 22.9cm (9" x 9")

ESD Safe, Electro Static Dissipative Purity Wipes



Note: enlarged to show fabric

The class 10 clean room compatible and highly absorbent static dissipative Purity Wipes are comprised of continuous filament polyester fiber that includes DuPont's NEGA-STAT® carbon yarn. The carbon yarn enhanced the electrical conductivity of the wipes, which

promptly disperses electrical static. Basis Weight 115g/m². Color: white with gray stripes to designate ESD.

81238	ESD Safe Purity Wipes,	White w/Stripes,	Standard
	Weight, 10.2 x 10.2cm	(4" x 4")	pkg/600

Wipes and Pads

■ TexWipe® All-purpose Cotton Wipes

For ISO Class 7 (Class 10,000 cleanroom) applications



Texwipe® wipes are 100% cotton woven from high quality, long-staple cotton fibers (no chemical additives) with tight-weave construction and a base weight of 175g/m². The twill patterned surface on both sides of the wipes traps and removes contaminants from the cleaned surface.

81446 TexWipe® Cloth, 15.2 x 15.2cm (6" x 6") . .pkg/600

Poly-Jean® Wipes



Poly-Jean® is a highly absorbent clean room class 100 compatible wipe, manufactured of 100% polyester with a non-raveling 60 count interlock knit fabric. The absorbency for oil, water and solvents exceeds 200%. Color: White.

81220	Poly-Jean® Wipes, Standard Weight,
	22.9 x 22.9cm (9" x 9")
81222	Poly-Jean® Wipes, Standard Weight,
	15.2 x 15.2cm (6" x 6")
81224	Poly-Jean® Wipes, Standard Weight,
	10.2 x 10.2cm (4" x 4")

Cheesecloth Wipes

in convenient dispenser box



Use to wipe, clean, or dry cuvets, delicate glassware, syringes, pipets, and pH electrodes. They are ideal for filtering and do not fall apart like paper towels.

All-purpose cheesecloth wipes are brilliant white and certified 100% pure cotton

of reagent-grade quality and purity. A unique combination of cleanliness, softness, absorbency and strength. Will not scratch sensitive surfaces.

808-31	Cheesecloth Wipes, 10.1 x 10.1cm (4 x 4")
808-32	Cheesecloth Wipes, 22.9 x 22.9cm (9 x 9")

■ Pre-Moistened Cleaning Pads and Wipes

Lint Free Cleaning Pads, Pre-Saturated with 96% Isopropyl Alcohol



Individually packed, lint-free cleaning wipes, saturated with 96% Isopropyl Alcohol and are safe for skin contact. Removes dust, dirt, oxides and most contaminants from instrumentation, tools and electronic equipment. Pad size is 3" x 4" in individually sealed packs.

Cleaning wipes size 9" x 11", Pre-Saturated with 70% Isopropyl Alcohol



Class 100 compatible cleaning wipes, pre-saturated with 70% Isopropyl alcohol and 30% deionized water. The fabric is constructed of continuous polypropylene fibers bonded to-

gether with a meltblown process. This ensures superior strength with low fiber and particulate generation.

Cleaning wipes size 6" x 8.5", Pre-Saturated with 70% Isopropyl Alcohol



Class 100-compatible cleaning wipes, presaturated with 70% Isopropyl Alcohol and 30% deionized water. The fabric is a blend of polyester and cellulose, hydroentangled to provide high strength without the use of binders, starches or thermal bonding. Low particulate, nonwoven absorbent structure.

Wipes; Lens Paper, Lens Cleaning Cloth; Selvyt Cloth

■ Kimwipes®



Kimwipes single ply delicate task, lint-free wipes. 100% virgin cellulose construction. Easily wipes up liquid and dust

808-1	Kimwipes, Small,
	11.4 x 21.6cm (4.5 x 8.5"), 280/box case/12
808-2	Kimwipes, Large,
	38.4 x 43cm (15" x 17"), 140/box each

■ Holder - Dispenser for Kimwipes®





Holds one box of the Small Kimwipes, $11.4 \times 21.6 \text{cm}$ (4.5" x 8.5") size. Center column keeps tissues pushed up to the top for easier dispensing.

808-10 Holder - Dispenser for Kimwipes each

■ MultiWipes[™]



An alternative laboratory wipe, at large savings. Wipes are made from 100% recycled paper fibers.

MultiWipes Small, 11.4 x 21.1cm (4.5 x 8.3") 809-1 MultiWipes, Small, 280/boxcase/12
MultiWipes Large, 38.1 x 42.2cm (15 x 16.6") 809-2 MultiWipes, Largebox/140

■ PELCO® Lens Paper



Phone: 800-237-3526

Excellent cleaning of light microscope optics. Manufactured to high standards and used in EM laboratories for general cleaning or on liquid troughs for "skim-

ming" surfaces. Virtually lint-free. 50/booklet. 10 x 15.2cm, (4" x 6").

810 PELCO® Lens Paper, booklets of 50 sheets . . .pkg/12

■ Ross Optical Lens Tissue



Non-abrasive.
Processed from
100% linen stock;
free of mineral and
vegetable filler. Does
not lint or scratch
and will not disinte-

grate under vigorous manipulation.

811	Ross Lens Tissue, Regular, 10.8 x 12.7cm (4-1/4 x 5"), 800/box
811-3	Ross Lens Tissue, Large, 21.6 x 35.6cm (8-1/2 x 14"), pkg/100

■ 3M[™] Lens Cleaning Cloth



Lint-free and scratch-free! The unique 3M™ microfibers lift dust and oils from delicate lenses without the use of chemicals. Ideal for eyeglass lenses, camera lenses, binoculars, microscopes and other delicate surfaces. The cloth is

reusable and machine washable hundreds of times. Individually packaged 18 x 16cm (7 x 6") cloths, 10 to a box, two boxes (20 cloths) per case. Note: Cloths will not scratch surfaces, but can pick up particles that scratch. Each box contains multiple colors; blue, yellow and gray. Can be used with Sparkle Optical Lens Cleaner, see next page.

813-20 3M[™] Lens Cleaning Cloth case/20

■ Selvyt Cloth



Lint-free and staticfree cloth. Useful for general purpose cleaning of metal surfaces. 25 x 25cm (9.8 x 9.8")

CLEANING

High Performance Cloth; Scotch-Brite™ Hand Pads; Bell Jar Kleen, Glass Cleaner

■ 3M[™] Scotch-Brite[™] High Performance Cloth



Provides ultra cleaning power because of its knitted interwoven design of water- and oil-absorbing microfibers that lift and trap liquids, grease, dust and dirt particles, even without chemicals. Unprecedented dry dusting and damp polishing ability. Machine washable, dryer safe. Size: 32 x 36cm (12.6 x 14.2"). Colors: Blue, White, Yellow.

813-10	3M [™] Scotch-Brite [™] High Performance Cloth,
	• Blue
813-12	3M [™] Scotch-Brite [™] High Performance Cloth,
	\bigcirc White
813-14	3M [™] Scotch-Brite [™] High Performance Cloth,
	Yellow pkg/5

■ 3M[™] Scotch-Brite[™] Hand Pads

versatile, non-rusting abrasive pads for use on metals, ceramics and composites



These renowned abrasive cleaning pads are made of tough non-woven open nylon web with embedded abrasive particles. The Scotch-Brite™ pads are waterproof and they can be used wet or dry. They are designed to provide consistent performance from start to finish, leaving a uniform surface. The open web construction will not rust like steel

wool and can be rinsed and used repeatedly. Size 15.2 x 22.9cm (6 x 9"). They are available in 5 grades, ranging from a medium/coarse grade for heavy duty cleaning applications to an ultra-fine grade for light cleaning applications and final surface finishing. For soft materials, such as brass and aluminum the finer grades should be used.

Applications include:

- Cleaning of worktops, ceramic tiles and sinks
- Cleaning of laboratory tools such as heaters, beakers and mixers

- Cleaning prior to soldering or welding
- Masking or removing surface imperfections
- Blending of scratches on vacuum components
- Cleaning of stainless vacuum components
- Removing light rust/paint
- Deburring and removing sharp edges
- Surface finishing
- 80926 excellent starting point to clean, etc.

Most aggressive pad with tight and dense durable web: 80928 3M™ Scotch-Brite™ Pads #7440, Heavy Duty, Medium, Tan box/10

Intermediate pad for cleaning, finishing and graining: 80927 3M[™] Scotch-Brite[™] Pads #6444,

Extra Duty, Fine, Brown box/20

Most universal pad. Excellent starting pad: 80926 3M™ Scotch-Brite™ Pads #7444,

General Purpose, Very Fine, Maroon box/10

Fine mineral excellent for fine finish and light cleaning: 80929 3M™ Scotch-Brite™ Pads #7445,

Light Duty, Whitebox/20

Finest pad available for final finishing and light cleaning:

80930 3M[™] Scotch-Brite[™] Pads #7448,

Ultra-Fine, Light Graybox/20

■ PELCO Bell Jar Kleen[™]



PELCO Bell Jar Kleen[™] is a non-scratching polishing and cleaning compound specially formulated for glass and porcelain surfaces. Ideally suited for cleaning glass bell jars used on vacuum evaporators, vacuum chambers from sputter and carbon coaters and glass windows in large coating systems. Can be used on vacuum chambers made from Corning, Schott or Pyrex glass. M

896 PELCO Bell Jar Kleen™, 14 oz. (455g) each

■ Sparkle Glass Cleaner



80920 Sparkle Glass Cleaner, 1 liter (33.8 fl. oz.) each

■ = MSDS on web page

FAX: 530-243-3761

Glass Cleaner; Lens Cleaner; Adhesive Remover; Sticker and Marker Remover; Degreaser

■ Invisible Glass, Premium Glass Cleaner



Invisible Glass was developed with two important objectives: superior cleaning power and "invisible" clarity. It is engineered with a powerful multi-component formula to quickly remove fingerprint, dust, plasticizer film, oily dirt, pollutants and other difficult grime. Invisible glass does not contain soaps, foams, scent or dyes to avoid leaving residue or haze on the cleaned surface. Can be used to clean glass, mirrors, displays, monitors, fume hoods, porcelain, etc. Also gives excellent results for cleaning lab bench surfaces. For best results, spray on surface and wipe with a lint-free cloth or wipe (see cleaning cloths).

On delicate or difficult to reach surfaces. spray the cloth or wipes first and then wipe the surface. M H-F

80922 Invisible Glass, Premium Glass Cleaner, 560ml (19 fl. oz.) each

Invisible Glass, Premium Glass Cleaner



Same as above but in pump spray container.

80922-10 Invisible Glass. Premium Glass Cleaner. 643 ml (22 fl. oz.) each

Sparkle Optical Lens Cleaner



Phone: 800-237-3526

A transparent non-ammonia, non-alcohol, safe cleaner for high tech lenses. Apply Sparkle Optical Lens Cleaner to surface to be cleaned and wipe with clean Lens Cleaning Cloth (813-20). Excellent for microscopes, magnifiers, eye glasses and safety goggles. Do not use on contact lenses. Anti-Static properties limit dust attraction. Testimonials from universities and private labs as the first non-alcohol product that is safe for objective lens use. M

Sparkle Optical Lens Cleaner, 119.4 ml (4 oz.) each

■ 3M™ Adhesive Remover



Powerful replacement for mineral spirits, solvents and other unfriendly cleaners. Ideally suited for removing used grinding / lapping / polishing discs with PSA backing from their support discs. New food-grade citrus-based 3M Adhesive Remover is also very effective in removing overspray of any aerosol adhesives, grease, oil, grime, tape residue, tar, wax, etc. A solvent-free formulation that provides wipe-away convenience with no filmy residue. No CFC's. M H→F

Active ingredient is listed as GRAS (Generally Regarded As Safe) for food contact applications under FDA21 CFR 182.20.

Flammable propellant (propane). Note: Not for sale in California.

80924 3M[™] Adhesive Remover, 6.25 oz. cans . . .case/6 **80924-1** 3M[™] Adhesive Remover, 18.5 oz. can each 80924-10 3M[™] Adhesive Remover, 18.5 oz. can . .case/6

Scotch® Sticker and Marker Remover



convenient and handy small size

A pH neutral pen that is a citrus based adhesive remover, which also removes sticker, stains, printer and marker blemishes. No petroleum distillates. Note: Not for sale in California. M

80924-20 Scotch® Sticker and Marker Remover Pen each

CUT Non-chlorinated Cleaner and Degreaser



Powerful, precision cleaner and degreaser that removes grease, oils, waxes, inks, tars and silicone oils from instruments, tools, metal parts, rotary vacuum pumps, etc. Developed as an alternative to chlorinated solvents for precision cleaning. Non-chlorinated formula cleans fast and saves time. Dries fast, leaves no residue. Does not contain CFC's. M

80921 CUT Non-chlorinated Cleaner and Degreaser, 340 g (12 oz.) each

 $\mathbf{M} = \mathsf{MSDS}$ on web page

■ All Citrus Cleaner and Degreaser



This all natural precision cleaner is typically used as a degreaser for removing resins, grease, oils, adhesives, ink, silicones and contaminants from instruments, machinery, engines, tools and metal parts. Made entirely from a highly refined extract of citrus fruits which are more environmentally friendly than petroleum based products. Does not contain CFC's. M

80923 All Citrus Cleaner and Degreaser, 341 g (12 oz.) each

■ Liqui-Nox® Critical Cleaning Liquid Detergent formulated from Alconox®



Concentrated, anionic detergent for manual and ultrasonic cleaning. Free rinsing to give you reliable results without interfering residues. Extremely mild and completely soluble in hard and soft water. USDA authorized. Dilute 1:100. pH 8.5.

81126 Liqui-Nox® Cleaning Liquid Detergent, 1 gal. bottleeach

■ XENIT All Natural Cleaner and Remover



XENIT contains a proprietary cleaning formula with Citrus 66[™] - an all natural, highly refined extract of citrus fruits. Developed to quickly remove adhesives, labels, stickers, tape, grease, ink and permanent marker from a wide variety of materials. Does not contain CFC's. M

80925 XENIT All Natural Cleaner and Remover, 283 g (10 oz.) each

■ Alconox® Powdered Precision Cleaner

biodegradable, concentrated, interfering residue-free



Alconox detergents set the standards for critical cleaning. Scientists, engineers, and professionals specify Alconox detergents in their cleaning procedures for optimum economy, environmental safety and performance.

Concentrated, anionic detergent for manual and ultrasonic cleaning. Formulated to give you reliable results without interfering residues. Ideal for cleaning contaminants from glassware, metals, plastic, ceramic, porcelain, rubber and fiberglass. Excellent replacement for corrosive acids

and hazardous solvents. USDA authorized. Dilute 1:100. pH 9.5.

81125 Alconox® Powdered Cleaner, 4 lb each



■ Epoxy Hand Cleaner

Premium, heavy duty cleansing agent, formulated to speed the removal of all types of epoxy residue. Contains mineral spirits and isopropyl alcohol. It effectively dissolves epoxy, polyester, urethane, lacquer, grease, oil and many other hard to remove soils. 450ml (15 fluid oz.) bottle.

19972 Epoxy Hand Cleaner, 450ml . . .each



■ Professional Paint, Stain, Epoxy Hand Cleaner

Don't clean your hands with dangerous paint thinners or other harsh chemicals. GoJo is the safer way to clean your hands. Thoroughly cleans stains, varnishes, dyes, inks, sealers, adhesives, acrylic enamel, acrylic lacquer, acrylic urethane, enamel, epoxy, lacquer, latex, oil base, single component polyurethane paints, primers, plastic filler and putty. 650ml (22 fluid oz.) bottle. Non-Toxic.

19978 GoJo Paint and Stain Hand Cleaner, 650ml each



■ Barrier Cream 222®

skin protectant with silicone

For wet or dry work, helps protect skin against many sticky, staining, irritating industrial substances. 222® is not readily removed by many water based or oil based substances. To remove wash vigorously with soap and water. Tube of 118ml (4 fl. oz.). M

19974 Barrier Cream 222®, 4 fl. oz. each

M = MSDS on web page

■ UltraSense[™] Blue Nitrile Gloves

Unique manufacturing process delivers an outstanding grip in

wet and dry environments. A superior value, ambidextrous, synthetic glove that has a beaded cuff and is powder-free. 100 gloves per dispenser box.

Length: 9.6" (245mm) Palm thickness: 3.5 mil (0.09mm)

Finger thickness: 4.7 mil

(0.12mm)



81850 UltraSense™ Nitrile Gloves, smallbox/100
81851 UltraSense™ Nitrile Gloves, medium box/100
81852 UltraSense™ Nitrile Gloves, largebox/100
81853 UltraSense™ Nitrile Gloves, x-largebox/100

Mini Scraper





Holds one single edge blade securely. Easily remove blade by pulling back center tab on handle. Place cutting edge of blade

into handle and lock in place when not in use, for safety and to protect

blade edge. Comes with one single edge blade.

54560 Mini Scraper with one bladepkg/5

■ 3M[™] Stainless Steel Cleaner and Polish



Ideal for stainless steel, chrome, laminated plastics and aluminum surfaces. Pleasant lime fragrance. Contains no petroleum distillates. Ready-to-use quart. 6 quarts and 1 trigger sprayer per case. Ready-to-use quart. 6 quarts and 1 trigger sprayer per case.

■ 3M[™] Light Scrubbing Pad



A convenient, thick, hand-sized pad designed for gentle, no-scratch cleaning of the most delicate surfaces. Typical applications: glass, plastic, fine china, porcelain, ceramic, non-stick surfaces and glass cookware.

80931 3M[™] Light Scrubbing Pad case/40

Branson Ultrasonic Cleaners



Precision Cleaning Power

Ultrasonic cleaning is faster, more thorough and safer than most other methods. Scrubbing, soaking and steam don't even come close. It is powerful enough to remove proteins,

waxes and heavy oils. It penetrates to deflux circuit boards and SMDs, yet is gentle enough to clean tiny precision assemblies.

De-gas Feature

Helpful at start-up. Ultrasonic pulses, activated before cleaning begins, remove unwanted air bubbles from the solution. This gives better results due to higher cleaning efficiency.

Digital Feature

Control of cycle time and temperature with clear readouts and one-touch setting. Maintains batch-to-batch consistently because the Cleaner resets automatically to the last time and temperature settings.

Accessories

Developed to make specimen handling easier. The most effective cleaning action occurs about one inch (2.5cm) from the tank's bottom. Using a tray gives more beneficial cleaning power.

■ Ultrasonic Cleaner Model 1510

(½ gal. / 1.91 liters)



Tank Size: 139.7 x 152.4 x 101.6mm (5.5 x 6 x 4")

Overall Size: 254 x 304.8 x 292mm (10 x 12 x 11.5")

Tank Capacity: 1.91L (½ gal.)

Weight: 3.18kg (7 lbs.)

Frequency: 40kHz

Cover included

(UL, CSA, ISO 9001 certified)

Mechanical Timer, 80 watts

17670	Ultrasonic Cleaner, Model 1510, 120 VAC	each
17670-2	Ultrasonic Cleaner, Model 1510,	
	230/240 VAC	each

Mechanical Timer plus Heater, 143 watts

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17672	Ultrasonic Cleaner, Model 1510, 120 VAC	each
17672-2	Ultrasonic Cleaner, Model 1510,	
	230/240 VAC	.each

continued next page

Phone: 800-237-3526

CLEANING

Ultrasonic Cleaners; Beakers, Baskets and Insert Trays for Ultrasonic Cleaners

Model 1510 continued

Digital Control Plus Heater, De-gas and Digital Timer, 143 watts

	,	
17674	Ultrasonic Cleaner, Model 1510, 120 VAC	each
17674-2	Ultrasonic Cleaner, Model 1510,	
	230/240 VAC	each

Model 1510 Accessories (½ gallon / 1.91 liters)



17301	Solid Insert Tray (½ gallon / 1.91 liters) each
17302	Perforated Insert Tray (½ gallon / 1.91 liters)each
17303	Mesh Basket (½ gallon / 1.91 liters) each
17304	Tank Cover (½ gallon / 1.91 liters) each
17311	Beaker Holder, 1 x 600ml each

■ Polypropylene, Pyrex® and Stainless Steel Beakers for use with Ultrasonic Cleaners



The Pyrex® and Polypropylene beakers are graduated in ml. Easy pour lip on all four. All listed below will work with ultrasonic cleaners.

17329	Pyrex® Beaker, 250mleach
17309	Pyrex® Beaker, 400ml each
17327	Pyrex® Beaker, 600ml each
17328	Stainless Steel Beaker, 600ml each
17328-1	Beaker Cover for 17328 each
17310	Polypropylene Beaker, 400ml each
21206	PTFE Beaker, 100ml, 54mm OD,
	49mm ID, 68mm H each

■ Ultrasonic Cleaner Model 2510

(3/4 gal. / 2.84 liters)



Mechanical Timer, 130 watts

Tank Size: 241.3 x 139.7 x 101.6mm (9.5 x 5.5 x 4")

Overall Size: 343 x 304.8 x 292mm (13.5 x 12 x 11.5")

Tank Capacity: 2.84L (¾ gal.)

Weight: 4.07kg (9 lbs.)

Frequency: 40kHz

Cover included

(UL, CSA, ISO 9001 certified)

17678 Ultrasonic Cleaner, Model 2510, 120 VAC .each 17678-2 Ultrasonic Cleaner, Model 2510, 230/240 VACeach Mechanical Timer Plus Heater, 239 watts

Digital Control Plus Heater, De-gas and Digital Timer, 239 watts

Model 2510 Accessories (¾ gal. / 2.8 liters)



17321	Solid Insert Tray (¾ gallon / 2.8 liters) each
17322	Perforated Insert Tray (¾ gallon / 2.8 liters)each
17323	Mesh Basket (¾ gallon / 2.8 liters) each
17324	Tank Cover (¾ gallon / 2.8 liters) each
17325	Beaker Holder, 2 x 600ml each
17326	Beaker Holder, 2 x 250ml each

Ultrasonic Cleaner Model 3510

(1.5 gal. / 5.68 liters)



Tank Size: 292.1 x 152.4 x 152.4mm (11.5 x 6 x 6")

Overall Size: 16 x 12 x 15.5" (406.4 x 304.8 x 368.3mm)

Tank Capacity: 5.68L (1.5 gal.)

Weight: 5.44kg (12 lbs.) Frequency: 40kHz

Cover included

(UL, CSA, ISO 9001 certified)

Mechanical T	imer, 1	30	watts
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17686

Ultrasonic Cleaner, Model 3510, 120 VAC each 17686-2 Ultrasonic Cleaner, Model 3510, 230/240 VAC each

Mechanical Timer Plus Heater, 335 watts

Ultrasonic Cleaner, Model 3510, 120 VAC each 17688-2 Ultrasonic Cleaner, Model 3510,

230/240 VACeach

Digital Control Plus Heater, De-gas and Digital Timer, 335 watts

17690 Ultrasonic Cleaner, Model 3510, 120 VAC each 17690-2 Ultrasonic Cleaner, Model 3510,

230/240 VAC each

Model 3510 Accessories (1.5 gal. / 5.68 liters)



17331	Solid Insert Tray (1.5 gallon / 5.68 liters) each
17332	Perforated Insert Tray (1.5 gallon / 5.68 liters) each
17333	Mesh Basket (1.5 gallon / 5.68 liters)each
17334	Tank Cover (1.5 gallon / 5.68 liters) each
17335	Beaker Holder, 2 x 600ml each
17337	Beaker Holder, 3 x 250ml each

Phone: 800-237-3526

Ultrasonic Cleaner Model 5510

(2.5 gal. / 9.46 liters)



Tank Size: 292.1 x 241.3 x 152.4mm (11.5 x 9.5 x 6")

Overall Size: 406.4 x 393.7 x 368.3mm (16 x 15.5 x 14.5")

Tank Capacity: 9.46L (2.5 gallon)

Weight: 6.34kg (14 lbs.)

Frequency: 40kHz Cover included

(UL. CSA. ISO 9001 certified)

Mechanical Timer, 185 watts

17818 Ultrasonic Cleaner, Model 5510, 120 VAC each 17818-2 Ultrasonic Cleaner, Model 5510,

230/240 VACeach

Mechanical Timer Plus Heater, 469 watts

17820 Ultrasonic Cleaner, Model 5510, 120 VAC each

17820-2 Ultrasonic Cleaner, Model 5510,

230/240 VACeach

Digital Control Plus Heater, De-gas and Digital Timer, 469 watts

17822 Ultrasonic Cleaner, Model 5510, 120 VAC each

17822-2 Ultrasonic Cleaner, Model 5510,

230/240 VAC each

Model 5510 Accessories (2.5 gal. / 9.46 liters)



17341 Solid Stainless Steel Insert Tray (2.5 gal / 9.46 liters) each **17345** Beaker Holder, 4 x 600ml each

Ultrasonic Cleaners, Ultrasonic Cleaning Solutions

■ Compact Ultrasonic Cleaner B-3

(1 pint / 47 liters)

intermediate ultrasonic cleaning, for smaller labs



UL, CSA, ISO 9001 certified Model B-5 available for 220 volt service Capacity: 0.47 liters (1 pint) Housing: 133 x 133 x 159mm (5-1/4" x 5-1/4" x 6-1/4") (L x W x H) Stainless tank: 76mm deep x 89mm diameter (3 x 3-1/2") Weight: 1.3kg (3 lbs)

Frequency: 55Khz

Smaller Cleaner for smaller jobs than the 1510, 2510, 3510, 5510 series. Furnished with small parts holder. Approximately 50 watts (UL).

Hint: If you run the cleaner for 1-2 minutes and allow degassing of the cleaning solution before inserting parts, quicker and more effective cleaning will occur. Warm water helps.

17030	Ultrasonic Cleaner,	B-3,	120 VAC	each
17031	Ultrasonic Cleaner	R-5	230 VAC	each

■ Small Ultrasonic Cleaner B-200

(15 oz. / .44 liters)



Capacity: 0.42 liters (15 oz.)

Housing: $194 \times 121 \times 117$ mm ($7-\% \times 4-\%$ ") (L x W x D) Stainless tank: $168 \times 89 \times 54$ mm) ($6-\% \times 3-\frac{1}{2} \times 2-\frac{1}{8}$ ") (L x W x D) Useable dimensions within working basket: $159 \times 83 \times 44$ mm

 $(6^{-1}/_{4} \times 3^{-1}/_{4} \times 1^{-3}/_{4}")$ (L x W x D).

UL, CSA, ISO 9001 certified.

Practical working shape for many items such as eyeglasses and other smaller applications. Comes with small parts holder. Approximately 50 watts.

17108 Ultrasonic Cleaner, Model B-200, 120 VAC each

PELCO Kleensonic[™] Ultrasonic Cleaning Powders and Solutions

All PELCO Kleensonic™ ultrasonic cleaning solutions are formulated for high performance cleaning, are environmentally friendly, concentrated to reduce shipping costs.

■ PELCO Kleensonic™ WRS Wax Stripper



PELCO Kleensonic™ WRS is an environmentally friendly cleaning compound in powder form formulated for removing mounting waxes used in specimen preparation, semiconductor processing and casting. Needs to be dissolved in water to make the cleaning solution (makes 2.67 gal). ■ C; M H◆F

17388 PELCO Kleensonic[™] WRS, 1 lb. each



■ PELCO Kleensonic[™] APC Ultrasonic Cleaning Detergent

PELCO Kleensonic™ APC is a powerful liquid detergent for ultrasonic cleaning of semiconductor, silicon, glass and electronic materials/parts. The detergent formulation is of the multiple acting type with especially good solvent action. It possesses high sequestering ability, strong surface activity, good suspension and emulsification properties (makes 8 gallons). ■ C; M H◆F

17385 PELCO Kleensonic™ APC, 1 qteach

■ PELCO Kleensonic[™] CDC Ultrasonic Cleaning Powder Concentrate



PELCO Kleensonic[™] CDC is a high performance, heavy-duty ultrasonic yet environmentally friendly cleaning powder. Fast acting, long lasting and saves costs, space and time. It is easy to handle, completely biodegradable, odorless, ammonia-free and non-flammable. PELCO Kleensonic[™] CDC cleans and degreases and can be used for removing oils, greases, fingerprints, dust, packaging particulates, soils and buffing and polishing com-

pounds (makes 75 gal). ■ I; M H → F

17386 PELCO Kleensonic[™] CDC, 2 lb. each

C = Corrosive
 I = Irritant
 M = MSDS on web page
 H→F = HAZARD Fee may apply*

FAX: 530-243-3761

Ultrasonic Cleaning Solutions

Branson Ultrasonic Cleaning Solutions



■ MC-1 Metal Cleaner

Biodegradable, phosphate- and caustic-free alkaline cleaner formulated for heavy duty industrial use. Removes oils, greases and a wide variety of soils from aluminum and aluminum alloys as well as copper, brass, and steel substrates. Effective in removing stamping and cutting lubricants, and light polishing media. MC-1 displaces soils and floats them to the surface for easy removal with a skimmer. Corrosive (contains phosphates). Use 3 to 10% concentration by volume, 7% optimum (1 quart makes 3.5 gallons @ 7%).

17360	MC-1 Metal Cleaner,
	1 gallon solution concentrateeach
17360-1	MC-1 Metal Cleaner,
	1 quart solution concentrateeach

■ JC Jewelry Cleaner

Biodegradable, phosphate-free alkaline cleaner for cleaning jewelry and precious metals. Removes general soils, particulates, fingerprints, oils, and oxides that accumulate with normal use. Gemstones and precious metals alike are quickly and safely restored to their original brilliance with this free-rinsing solution. Corrosive (contains sodium metasilicate), 1 quart (0.95L) makes 3 gallons (10.8L).

17374	JC Jewelry Cleaner (soils, prints, gems, rings),
	1 quart solution concentrate each

■ GP - General Purpose Cleaner

Biodegradable caustic-free alkaline cleaner. Removes general soils, fingerprints, dust, packaging particulates, and light oils and greases from components in general manufacturing areas, instrument shops, telecommunications applications, and other light industrial manufacturing and fabricating facilities. Corrosive (contains sodium metasilicate). 1 quart (0.95L) makes 3 gallons (10.8L).

17381	GP General Purpose Cleaner Solution,
	1 quart solution concentrate each

OR - Oxide Remover

Phone: 800-237-3526

Blend of detergents and acidic chemistries which is both phos-

phate-free and biodegradable. Rapidly removes rust and oxides from all metals. It is used in cleaning and reconditioning materials and components requiring removal of oxides that result from storage or assembly operations. 1 gallon (3.8L) makes 16 gallons (60.8L). M

17382 OR Oxide Remover (rust, metal oxides), 1 gallon concentrateeach

IS - Industrial Strength Cleaner

Biodegradable phosphate and caustic-free alkaline cleaner for heavy industrial use. Removes grease, oils, and particulates from automotive, aircraft, and similar mechanical components; oils and lubricants from machined parts and stampings in machine and metalworking shops. It is often used by chemical plants, petrochemical refineries, appliance factories, telecommunications equipment producers, printing plants, and other industrial manufacturing and fabricating facilities. Corrosive (contains sodium metasilicate).

17383 IS Industrial Strength Cleaner (cutting oils, metal chips, grease, carbon), 1 gallon each

17383-1 IS Industrial Strength Cleaner (cutting oils, metal chips, grease, carbon), 1 quart each

■ OC - Optical Cleaner

Alkaline, non-foaming, liquid detergent formula for the optical, glass and lens manufacturing industry. Removes general soils, fingerprints, cerium oxide, pitch, and blocking waxes from optical lenses. It is very effective in removing polishing compounds from glass and optical surfaces prior to deposition of coatings. C; M

17380	OC Optical Cleaner,	1	gallon						.each
17380-1	OC Optical Cleaner,	1	quart						.each

The Etching Effects of Solutions on Common Metals / Alloys							
Solution	Steel	Brass	Alu- minum	Magne- sium	Zinc	Stainless Steel	Tin
MC-1 Metal	none	none	none	none	none	none	none
JC Jewelry	none	none	none	none	none	none	none
GP General Purpose	none	none	slight attack	none	none	none	none
OR Oxide Remover	slight etch	none	slight attack	attacks	attacks	none	none
IS Industrial Strength	none	none	slight attack	none	none	none	none
OC Optical	none	none	none	none*	none	none	none'

^{*} No effect if solution temperature is less than 60°C (140° F).

Solution concentrations may vary. The amount used depends on the particular solution and the type of soil to be removed. Follow the instructions on the solution container.

C= CorrosiveM = MSDS on web pageH→F = HAZARD Fee may apply*

■ Applicator Sticks/Cotton Swabs



Hardwood, cotton-tipped on one end, 2 sizes. Can be used for cleaning delicate parts together with our Polishing Compounds.

80903	Applicator Sticks, Cotton Tipped, 7.6cm (3")box/1000
80907	Applicator Sticks, Cotton Tipped, 15.2cm (6")

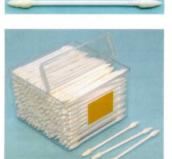
Cotton Swabs, Round, Double Head



Round cotton heads with polypropylene handles. Packaged 100 pieces in a polypropylene dispensing box with closing lid. Total length is 7.6cm (3").

80910 Cotton Swab Round, Double Head. 7.6cm (3") . .box/100

Cotton Swabs, Pointed, Double Head



Pointed cotton heads with polypropylene Handles. Packaged 240 pieces in a polypropylene dispensing box with closing lid. Total length is 7.6cm (3").

80911 Cotton Swab Pointed. Double Head. 7.6cm (3") . .box/240

Orangewood Sticks



Flat on both ends. Orangewood keeps a fine point, resists breaking. 4mm (3/2") diameter x 17.8cm (7") long. Useful for specimen prepara-

tion, sorting, and stirring.

■ Round Wooden Applicator Sticks



Applicator sticks made of birch wood, natural, not treated with chemicals.

Size: 2.4 x 150mm (3/32 x 6")

128-2	Round, Wooden Applicator Sticks,
	plain

■ Stirring Sticks



depressor type stick Mix, stir, scrape. Hardwood depressors provide strength and a clean, smooth finish. Made of white birch with a wax finish.

128-4	Wood Stirring Sticks, Medium,
	%"W x 5-½"L (16 x 140mm)pkg/100
128-5	Wood Stirring Sticks, Small,
	%"W x 4-½"L (10 x 114mm)pkg/1000
128-6	Wood Stirring Sticks, Large,
	¾"W x 6"L (19 x 152mm)

■ Bamboo Splints



A neat way to hold tissue for mincing. May also be used for cleaning apertures or as an applicator stick. Pointed on one end.

116	Bamboo Spiints,	15cm long	 pkg/100
	barriboo spiirts,	15cm long	 pkg/100

Wooden Picks



Cleaned, packaged in a clear dispenser with exit hole to keep the picks clean. Useful for picking, cleaning, sorting and holding. Double-pointed, 65mm L (2-½").

Industrial Cleaning Applicators

Choose from swabs that have a completely static-free construction or feature an anti-static foam head. Static dissipative swabs attract dust and dirt for easy cleaning, while reducing and dissipating static electricity.

■ Anti-Static Foam Tipped Applicators



Anti-Static Polyolefin

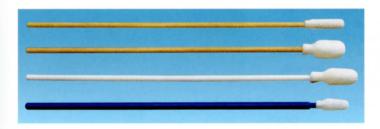


Anti-Static Wood

Anti-Static properties will not decay over time. Swabs meet all industry standards and requirements ASTM-D257 and Federal test method 4046, standard 101C.

81520	Anti-Stat Polyolefin 5-%" Long,
	Rectangular Tip, $\frac{1}{6}$ x 1x $\frac{3}{6}$ " thickpkg/50
81522	Anti-Stat Polyolefin 6" Long,
	Tip ¾6 x 11/16"pkg/50
81524	Anti-Stat Wood 6" Long,
	Tip ¾6 x 1¼6"pkg/50
81526	Anti-Stat Wood 6" Long,
	Tip 3/4 x 13/16"

■ Chemical Resistant Applicators



The tips are specially designed to withstand many of the chemicals and solutions commonly used in clean rooms.

Foam tips are resistant to deterioration - they will not swell or break apart. Wood or polypropylene shafts.

81530	Chem-Resist Applicators,
	Wood Shaft 6" L, Tip 3/6 x 11/6"pkg/50
81532	Chem-Resist Applicators,
	Wood Shaft 6" L, Foam over cotton pkg/50
81534	Chem-Resist Applicators,
	Polypropylene Shaft 6" L, Foam over cotton pkg/50
81536	Chem-Resist Applicators,
	Polypropylene Shaft 6" L. Spatula end tippkg/50

Phone: 800-237-3526

■ Wide Foam Tipped Applicators



Rectangular and round tips are made from 100% urethane foam designed to stand up to solvents and rigorous conditions. Shafts are polypropylene. Foam heads are thermally bonded to shafts.



81440	W-F-T Applicators, 5" shaft,
	Rectangular Tip, 11/16 x 1" Lpkg/50
81442	W-F-T Applicators, 5" shaft,
	Rectangular Tip, $\%_6$ x $\%_6$ " L pkg/50
81444	W-F-T Applicators, 5" shaft,
	Round Tip, $^2\%_2$ x $^1\%$ " L

■ Polyester Tipped Applicators



From top to bottom:

1/46" (1.6mm) wide with 3" (76.2mm) L acetal handle

 $\frac{1}{2}$ " (3.2mm) wide with 3" (76.2mm) L polypropylene or acetal handle

1/4" (6.2mm) wide with 3" (76.2mm) L polypropylene handle

1/4" (6.2mm) wide with 6" (152.4mm) L polypropylene handle



enlarged view of Prod. No. 81669, %" wide symmetrical tip

Made with double-ply non-woven polyester material bonded to polypropylene or acetal handles. Free from volatile residues, particulates and lint. Six different shapes and sizes. Use them to dust or clean wafers, fiber optics, medical devices, disk drives.

Polyester Tipped Applicator, 6" L, Paddle, ¾" tip, Polypropylene Handlepkg/50
Polyester Tipped Applicator, 6" L,
¼" tip, Polypropylene Handlepkg/100
Polyester Tipped Applicator, 3" L,
¼" tip, Polypropylene Handlepkg/100
Polyester Tipped Applicator, 3" L,
%" tip, Polypropylene Handlepkg/100
Polyester Tipped Applicator, 3" L,
¼6" tip, Acetal Handle
Polyester Tipped Applicator, 3" L,
½" tip, Acetal Handlepkg/100

CLEANING

Blade Cleaning Tools, Cleaning Brushes

Diamond and Sapphire Knife, Steel Blade and **Scalpel Cleaning Tools**

Pithwood



For cleaning diamond knife edge.

117-5 Pithwood Sticks pkg/10

■ PELCO® Diamond Knife and Blade Cleaning Tools





Material specially developed for cleaning debris from diamond knives. Also works very well on sap-

phire knives, scalpel blades, microtome blades. Vibratome blades, diamond scribers and minitools. The PVA material wicks liquids instantaneously. The sponge type material stays rigid when using alcohol as cleaning fluid and assists in removing debris from the knife edge. When water is used the material becomes soft and a wiping cleaning action can be applied. May be used multiple times.

Wedged tip on a plastic holder

Block with rounded ends 1-1/2 x 3/4 x 1/2" (38x18x13mm)

122-10	Diamond Knife Cleaning Wedgespkg/20
122-20	Diamond Knife Cleaning Blockpkg/5

TED PELLA, INC.

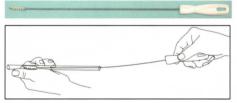
PELCO® Pro Cleaning Brushes

over 30 different styles available

A complete selection of specially designed, high quality cleaning brushes for all cleaning tasks in your lab. With this wide choice of cleaning brushes, made in the U.S.A., you will find the perfect brush to clean glassware, baths, ducts, pipes, hoses, ultrasonic cleaners, instruments, etc. Brushes are available for both delicate and heavy cleaning tasks with sturdy polypropylene bristles, non-scratching cleaning with soft closed cell polypropylene and large area cleaning with nonwoven polypropylene open fiber pads.

Most brushes are constructed with galvanized steel wire and polypropylene handles. Brushes with the narrower galvanized wire are designed to be bent to reach difficult places or to comply with the form of the container which needs to be cleaned.

■ Thin Tube Cleaning **Brush**

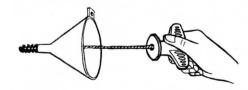


Use to clean thin tubing. Handle and bristles are polypropylene. Length from handle to tip of brush: 35cm (13.8"). Brush length x diameter: 32mm x 8mm diameter (1.25" x 1/6" diameter). Twisted pair wire diameter: 2.9mm (.115").

11900 Thin Tube Cleaning Brush pkg/4

Strong Spout and Tube Brush





Heavy twisted wire for bend resistance. Handle and bristles are polypropylene.

www.tedpella.com

Length from handle to tip of brush: 30cm (12"). Brush length x diameter: 89mm x 9.5mm dia. (3-½" x ¾" dia.) with taper at tip. Twisted pair wire diameter: 2.9mm (.115").

11902 Strong Spout and Tube Brushpkg/3

■ Pipe and Drain Brush

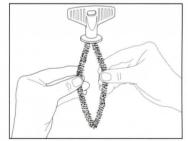


Thin, flexible brush. Handle and bristles are polypropylene. Length from handle to tip of brush: 33.7cm (13-1/4"). Brush length x diameter: 34mm x 8mm dia. (13-1/4" x 5/16" dia.) with taper at tip. Twisted pair wire diameter: 2.9mm .115").

11904 Pipe and Drain Brush . . . pkg/3

Test Tube Brush



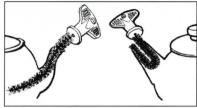


Brush may be spread apart to adjust to size. Handle and bristles are polypropylene. Length from handle to tip of brush: 16.8cm (6-%"). Brush length x diameter: 34mm x 11mm dia. each (6-5/1" x 1/16" dia. each). Twisted pair wire diameter: 2.9mm (.115").

11906 Test Tube Brush pkg/2

■ Funnel and Spout Brush





For cleaning inside tapered tubes and spouts; easily bent to form to shape. Handle and bristles are polypropylene. Length from handle to tip of brush: 22cm (8-1/2"). Brush length x diameter: 22cm x 24mm dia. (8-1/2" x 15/16" dia.). Twisted pair wire diameter: 4.39mm (.173").

11910 Funnel and Spout Brush..pkg/3

Large Flask Brush



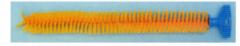


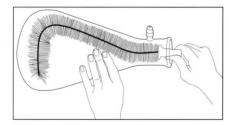
Multi-purpose brush cleans hard to reach areas. Handle and bristles are polypropylene. Length from handle to tip of brush: 39.4cm (15-½"). Brush (1) length x diameter: 28.6cm x 48mm dia. (11-1/4" x 1-1/8" dia.). Brush (2) (tip) length x diameter: 29mm x 22mm dia. (1-1/4" x %" dia.). Twisted pair

wire diameter: 8.13mm (.320").

11912 Large Flask Brush each

Long Bottle and Flask **Brush**





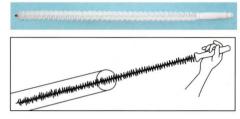
Can be bent to conform to interior curve of flask. Can be used with hot water. Han-

Phone: 800-237-3526

dle and bristles are polypropylene. Length from handle to tip of brush: 40.6cm (16"). Brush length x diameter: 40.6cm x 48mm dia. (16" x 1-%" dia.). Twisted pair wire diameter: 6.4mm (.252").

11914 Long Bottle and Flask Brushpkg/2

■ 24" Long Pipe Brush

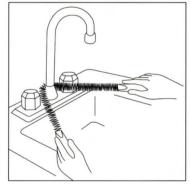


Good for cleaning long narrow openings and pipes. Handle and bristles are polypropylene. Length from handle to tip of brush: 63.5cm (25"). Brush length x diameter: 62.3cm x 32mm dia. (24-1/2" x 1-¼" dia.). Twisted pair wire diameter: 6.4mm (.252").

11916 24" Long Pipe Brush each

Faucet and Handle Brush





Bends to conform to many shapes. Handle and bristles are polypropylene. Length from handle to handle: 42.5cm (16-3/4"). Brush length x diameter: 37.5cm x 24mm dia. (14-3/4" x 15/16" dia.). Twisted pair wire diameter: 3.3mm (.130").

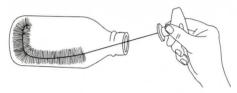
11916 Faucet and Handle

www.tedpella.com

■ Bottle Brush, Bent







Brush can be bent to conform to bottle shape. Handle and bristles are polypropylene. Length from handle to tip of brush: 30cm (12"). Brush length x diameter: 165mm x 38mm dia. (6-½" x 1-½" dia.). Twisted pair wire diameter: 2.9mm (.115").

11920 Bottle Brush, Bent pkg/3

Round Glass and Jar Brush





Cleaning a beaker, heavy twisted wire for bend resistance. Handle and bristles are polypropylene. Length from

handle to tip of brush: 17.1cm (6.75"). Brush width x diameter of coil: 44mm x 89mm dia. (1-¾" x 3-½" dia.). Twisted pair wire diameter: 4.37mm (.170").

11922 Round Glass and Jar Brush pkg/2

■ Large Cylinder Brush



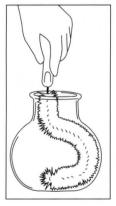


Scrub the sides and bottom of cylindrical lab ware. Handle and bristles are polypropylene. Length from handle to tip of brush: 25.4cm (10"). Brush length x diameter: 24cm x 38mm dia. (9-½" x 1-½" dia.) Twisted pair wire diameter: 4.6mm (.180").

11923 Large Cylinder Brush . . . pkg/3

■ Flat Bottom Flask Brush



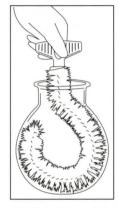


Can be bent to conform to multiple shapes. Handle and bristles are polypropylene. Length from handle to tip of brush: 31.8cm (12-½"). Brush length x diameter: 30.5cm x 44mm dia. (12" x 1-½" dia.). Twisted pair wire diameter: 4.6mm (.180")

11924 Flat Bottom Flask Brush .pkg/2

■ Round Bottom Flask Brush

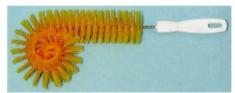


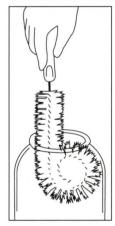


Handle and bristles are polypropylene. Length from handle to tip of brush: 38.1cm (15"). Brush length x diameter: 38.1cm x 44mm dia. (15" x 1-¾" dia.). Twisted pair wire diameter: 4.6mm (.180").

11926 Round Bottom Flask
Brushpkg/2

■ Flask Neck Brush





Stiff construction. Handle and bristles are polypropylene. Length from handle to tip of brush: 21cm (8-¼"). Brush length x diameter: 19cm x 48mm dia. (7-½" x 1-½" dia.). Twisted pair wire diameter: 4.6mm (.180").

11928 Flask Neck Brush pkg/2

■ Soft Washing Brush, Short





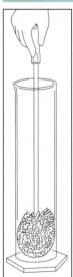
Good for washing stubby lab equipment. Handle is polypropylene, bristles are closed cell polypropylene foam. Length from handle to tip of brush: 15.3cm (6"). Brush length x diameter: 89mm x 77mm dia. (3-½" x 3" dia.).

Twisted pair wire diameter: 4.6mm (.180") Polypropylene plastic wire cover tube: 9.5mm dia. (%" dia.)

11930 Soft Washing Brush, Short pkg/2

■ Soft Washing Brush, Long





Excellent for washing deep graduated cylinders and flasks. Handle is polypropylene, bristles are closed cell polypropylene foam.

Length from handle to tip of brush: 36.8cm (14-½").

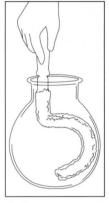
Brush length x diameter: 89mm x 77mm dia. (3-½" x 3" dia.). Twisted pair wire diameter: 4.6mm (.180").

Polypropylene plastic wire cover tube: 9.5mm dia. %" dia.).

11932 Soft Washing Brush, Long pkg/2

■ Soft Round Flask Brush, Adjustable





Can be adjusted by bending to shape or spreading dual brushes. Handle is polypropylene, bristles are closed cell polypropylene foam. Length from handle to tip of brush: 27.9cm (11"). Brush length x diameter: 27.9cm x 22mm (x2) dia. (11" x ¾ (x2)"

dia.).

11933 Soft Round Flask Brush, Adjustable each

■ Cylinder Soft Brush, ¾"





Can easily be bent to shape by pushing down into container. Handle is polypropylene, bristles are closed cell polypropylene foam. Length from handle to tip of brush: 37.4cm (14-½"). Brush length x diameter: 37.4cm x 19mm dia. (14-½" x ½" dia.).

11935 Cylinder Soft Brush, ¾" . .each

Phone: 800-237-3526

■ Cylinder Soft Brush, 1"



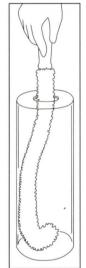


Can easily be bent to shape by pushing down into container. Handle is polypropylene, bristles are closed cell polypropylene foam. Length from handle to tip of brush: 36.8cm (14-½"). Brush length x diameter: 36.8cm x 25mm dia. (14-½" x 1" dia.).

11936 Cylinder Soft Brush, 1" . .each

■ Soft Flask Brush, %"



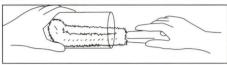


Stiffer and harder to bend than 11935 and 11936. Handle is polypropylene, bristles are closed cell polypropylene foam. Length from handle to tip of brush: 30.5cm (12"). Brush length x diameter: 30.5cm x 22mm dia. (12" x %" dia.).

11938 Soft Flask Brush, %" each

■ Jar Washing Brush





Tough plastic bristles will not damage delicate glassware. Stiff, non-bending. Handle and bristles are polypropylene. Length from handle to tip of brush: 146mm (5-¾"). Brush length x diameter: 146mm (x2) x 25mm dia. (5-¾ (x2)" x 1" dia.). Twisted pair wire diameter: 5.1mm (.2")

11939 Jar Washing Brush pkg/2

Keyboard Duster





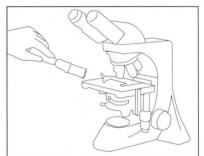
Good for cleaning all sensitive equipment. Handle and bristles are

polypropylene. Total length: 17.8cm (7"). Brush length x diameter: $41 \text{mm} \times 19 \text{mm}$ dia. (1-%" x %" dia.).

11942 Keyboard Duster pkg/2

■ Soft Instrument Duster

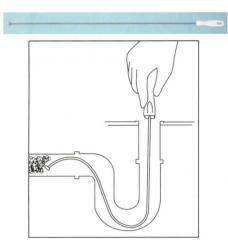




For microscopes, printed circuits, laboratory instruments, etc.. Handle and bristles are polypropylene. Total length: 16.5cm ($6^{-1}/2^{"}$). Brush length x diameter: 41mm x 19mm dia. ($1^{-}/2^{"}$) x $^{3}/2^{"}$ dia.).

11944 Soft Instrument Duster .pkg/2

■ Lab Drain Snake, 31"

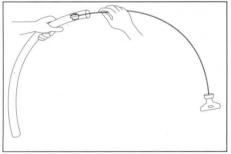


Flexible stem easily bends to fit into drain traps. Length from handle to tip of snake: 67.9cm (26-3/4"). Diameter of flexible stem: 4.8mm dia. (3/16" dia.).

11950 Lab Drain Snake, 31" . . . each

24" Flexible Tube Brush

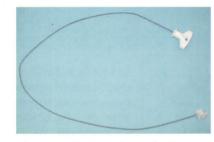




For cleaning plastic and metal tubes. Handle and bristles are polypropylene. Length from handle to tip of brush: 61cm (24"). Brush length x diameter: 38mm x 25mm dia. (1-1/2" x 1" dia.). Twisted pair wire, individual wire diameter/overall diameter: 1.6mm/2.95mm (.063"/.116").

11952 24" Flexible Tube Brush .each

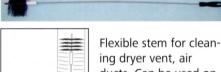
■ 48" Flexible Tube Brush



For cleaning plastic and metal tubes. Handle and bristles are polypropylene. Length from handle to tip of brush: 122cm (48"). Brush length x diameter: 38mm x 25mm dia. (1-½" x 1" dia.). Twisted pair wire diameter: 2.95mm (.116").

11954 48" Flexible Tube Brush .each

4" dia. Vent Duct Brush, 24" long



ducts. Can be used on straight, 45° and 90° bent ducts. Handle and bristles are polypropy-

lene. Length from handle to tip of brush: 78.7cm (31"). Brush length x diameter: 64mm x 102mm dia. (2-½" x 4" dia.). Diameter of flexible stem: 4.8mm dia. (3/6" dia.).

11956 4" dia. Vent Duct Brush, 24" long each

Small Lab Bottle Pad **Brush**





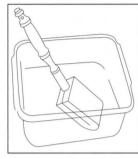
Firm handle curved end on brush. Works well on glass and plastic bottles. Brush is a non woven polypropylene material. Length from handle to tip of brush: 18.4cm (7-1/4"). Brush length x width: 114mm x 38mm (4-½" x 1-½").

Polypropylene plastic wire cover tube: 13mm dia. (½" dia.).

11960 Small Lab Bottle Pad

■ Large Lab Bath Pad Brush



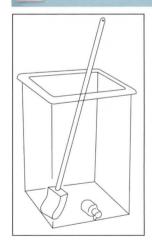


Long, sturdy plastic handle, good for cleaning ultrasonic cleaners, tubs and washing basins. Not affected by detergents and chemicals. Brush is a non-

woven polypropylene material. Length of handle: 24.8cm (9-3/4"). Brush length x width: 114mm x 76mm (4-1/2" x 3").

11962 Large Lab Bath Pad Brush each

■ Lab Vat Brush, Long Handle



For cleaning down into large containers. Brush is a non-woven polypropylene material. Length of handle: 83.8cm (33"). Brush length x width: 125mm x 76mm $(4-\frac{3}{4}$ " x 3").

11964 Lab Vat Brush, Long Handle each

FAX: 530-243-3761