Dispensette[®]

Dispensette® III, and Dispensette® Organic, bottletop dispensers improve accuracy, safety, and reagent conservation in a broad range of applications. They mount directly on most solvent and reagent bottles for faster, more convenient dispensing. Instruments are autoclavable at 121°C (250°F) for use with sterile reagents.

- Dispense Most Lab Reagents: Choose the Dispensette® III for acids, bases, saline solutions, as well as many organic solvents; the Dispensette® Organic for organic solvents, combinatorial chemistry solvents, concentrated acids such as HCl and HNO₃, trifluoroacetic acid (TFA), tetrahydrofuran (THF), and peroxides. See Selection Chart on page 38 for help selecting the best dispenser.
- Deliver Accurate, Precise Volumes: Dispensers are accurate to 0.5% (1% for 0.5mL models), with coefficients of variation of 0.1% (0.2% for 0.5mL). Digital models feature accurate and reproducible volume settings via a mechanical digital display. Easy Calibration™ technology simplifies ISO/GLP compliance.
- Increase Laboratory Safety: Dispensers mount on reagent bottles to reduce poured reagent transfers. They include a number of safety features to reduce the risk of injury from inadvertent dispensing and splashes. SafetyPrime™ valve system enhances reagent conservation and safety. Many accessories are available for remote, serial and drum dispensing.
- Resist Wear and Damage: Unique design ensures smooth operation and eliminates wearing parts.
 Dispensers disassemble easily to simplify cleaning and maintenance.
- HF and Trace Analysis Dispensing: For dispensing of high purity acids and solvents, or hydrofloric acid, choose the Dispensette® TA. For details, see page 37

The Standard in Bottletop Dispensing For Over 40 Years.







Dispensette® Volume Adjustment

Product Features:

Both the Dispensette® III and Dispensette® Organic are constructed using the "floating piston" principle.

Each piston is matched individually with precise tolerances to the cylinder of the instrument. A thin film of the dispensed liquid of just a few µm thick acts as a nonwearing seal that reduces friction, so dispensing is easy and convenient.

- The 45mm standard thread, plus included adapters, fit most common lab bottles.
- The valve block can be rotated 360° so that the bottle label always faces the user for safety.
- A telescoping filling tube adjusts to different bottle sizes.
- The instrument is easy to disassemble for cleaning.
- Valves are replaceable for simple, economical service.
- Dispensette® III and Dispensette® Organic are autoclavable at 121°C.
- Easy to calibrate and adjust in order to comply with ISO 9001 and GLP guidelines. A positive indicator automatically indicates adjustment from factory settings.
- An extensive line of accessories facilitates specialized dispensing tasks like sterile applications or dispensing from large containers.



Digital Easy Calibration™ models

- Digital Easy Calibration™ models enable accurate and reproducible volume setting with an easy-to-read display and a convenient adjustment knob. Simply turn the knob. The mechanical adjustment mechanism displays the volume in digits.
- Features unique Easy Calibration™ technology (see page 56) for calibration adjustment in seconds without tools.
- Excellent for labs with multiple users, and in circumstances requiring frequent volume changes to precise volumes.



Analog-adjustable models

- Analog slide enables rapid volume adjustments
- Calibration adjustments are simplified with included tool



Fixed-volume models

- Fixed-volume for standardized applications
- Calibration adjustments are simplified with included tool

Applications



One-handed operation

"Floating piston" design eliminates the seals that often wear and fail on other dispensers. This allows the Dispensette® piston to move very smoothly, permitting safe, simple, one-handed dispensing, even with a nearly-empty reagent bottle.



Dispensing sterile fluids

Dispensette® bottletop dispensers (except Dispensette® TA) are autoclavable at 121°C (250°F) and can be fitted with an optional microfilter to prevent contamination of bottle contents. Sterile technique must be followed.



Serial dispensing

The optional flexible discharge tube with safety handle speeds serial dispensing tasks, and permits fast and precise dispensing even into narrow test tubes. Functions of SafetyPrimeTM valve and safety discharge system are fully maintained with the flexible discharge tube.



Dispensing sensitive reagents

Optional drying tube screws into the accessory port of the Dispensette® to protect sensitive reagents from humidity or CO₂. (Absorbing agent not included.)

Dispensing from bulk containers minimizes risk of contaminating high-purity reagents

Simply connect the Dispensette® III or Dispensette® Organic to the optional Remote Dispensing System for accurate dispensing from drums and other bulk containers up to 10m (30 feet) away. Maximum delivery height is 1.2 meters. A quick-release connector with integrated valves simplifies changing the bulk container. The drum adapter air inlet filter minimizes risk of contaminating high-purity reagents.

NOTE: Not for use with SafetyPrime™ recirculation valve, pressurized vessels, peroxides (which will react with the platinumiridium spring), HF or other liquids which attack borosilicate glass, alumina ceramic, PFA, ETFE, FEP or PTFE. Observe all safety instructions, operating exclusions, and limitations of the operating manuals of the Dispensette® bottletop dispensers.



Dispensette® TA Trace Analysis

For dispensing high-purity chemicals

The Dispensette® TA provides outstanding performance for precise-volume dispensing of high-purity media for trace analysis. The Dispensette® TA is also suitable for dispensing HF (platinum iridium model.)

The components of the fluid path have been selected to only contain the highest purity materials, such as fluoroplastics and sapphire. Depending on application, either platinum-iridium or tantalum valve springs can be chosen. The volume range is from 1 to 10mL.

- · Especially well suited for dispensing acids, bases and hydrogen peroxide (TA models only).
- Trace metal content of dispensed liquid is generally in the low ppb range, or, depending on application, even in the low ppt range.

Dispensing of high-purity chemicals in trace analysis

- Plastics in contact with media consist of high-purity materials such as PTFE, ETFE, FEP, and PFA. The purest sapphire is used for replaceable valves. Depending on the application, platinum-iridium or tantalum are available as spring materials.
- A field-tested cleaning process before use in trace analysis is described in the operating manual.
- Easy to disassemble for replacement of the dispensing cartridge.

Recommended Application Range

| | 0 | |
|-----------------------|---------------------|------------------|
| Dispensing Medium | Valve spring: Pt-Ir | Valve spring: Ta |
| | | |
| Acetic acid | + | + |
| Ammonia solution | + | + |
| Bromine | + | + |
| Hydrochloric acid | + | + |
| Hydrofluoric acid | + | - |
| Hydrogen peroxide | - | + |
| Nitric acid | + | + |
| Perchloric acid | + | + |
| Sodium hydroxide, 30% | + | - |
| Sulfuric acid | + | + |
| Water | + | + |

The above recommendations reflect testing completed prior to publication. Always follow instructions in the operating manual of the instrument as well as the reagent manufacturer's specifications. Should you require information on chemicals not listed, please feel free to contact BrandTech® Status as of: 0713/2

Performing Trace Analysis?

See the VITLAB® PFA trace analysis labware on page 110.



The high-purity materials release virtually no metal ions after appropriate cleaning. This makes the Dispensette® TA bottletop dispenser a superior choice for trace analysis.

Replaceable Dispensing Cartridge

If the piston seal is worn after a long period of use, the entire dispensing cartridge can easily be replaced without tools by the user. The cartridge is fully adjusted at the factory and delivered with a performance certificate. No calibration is required after replacement.

Serial Dispensing

For easy serial dispensing, an optional flexible discharge tube with textured safety handle (not approved for HF) permits fast and precise dispensing, even into narrow

test tubes. Full functionality of the SafetyPrime™ recirculation valve and the safety discharge system is maintained after installation.

^{*} Hydrofluoric acid reacts slightly with sapphire resulting in mildly elevated aluminum values. To reduce these values we recommend discarding 3-5 dispensings of 2 ml each before performing the analysis

Areas of application / Suggested dispenser (as of July 2013)

■ Dispensette® III(Disp. III) ■ Dispensette® Organic (Disp. Organic)

| Reagent | Disp. III | Disp. Organic | Reagent | Disp. III | Disp. Organic | Reagent | Disp. III | Disp. Organic |
|--|-----------|------------------|--|-----------|------------------|--|-----------|------------------|
| Acetaldehyde | + | + | Cyclohexane | | + | Mineral oil (Engine oil) | + | + |
| Acetic acid (glacial), 100% | + | + | Cyclohexanone | + | + | Monochloroacetic acid | + | + |
| Acetic acid, 96% | + | + | Cyclopentane | | + | Nitric acid, 30% | + | + |
| Acetic anhydride | | + | Decane | + | + | Nitric acid, 30-70% * | | + |
| Acetone | + | + | 1-Decanol | + | + | Nitrobenzene | + | + |
| Acetonitrile | + | + | Dibenzyl ether | + | + | Oleic acid | + | + |
| Acetophenone | | + | Dichloroacetic acid | | + | Oxalic acid | + | |
| Acetyl chloride | | + | Dichlorobenzene | + | + | n-Pentane | | + |
| Acetylacetone | + | + | Dichloroethane | | + | Peracetic acid | | + |
| Acrylic acid | + | + | Dichloroethylene | | + | Perchloric acid | + | + |
| Acrylonitrile | + | + | Dichloromethane | | + | Perchloroethylene | | + |
| Adipic acid | + | | Diesel oil (Heating oil), bp 250-350 °C) | | + | Petroleum, bp 180-220°C | | + |
| Allyl alcohol | + | + | Diethanolamine | + | + | Petroleum ether, bp 40-70°C | | + |
| Aluminium chloride | + | | Diethyl ether | - | + | Phenol | + | + |
| Amino acids | + | | Diethylamine | + | + | Phenylethanol | + | + |
| Ammonia, 20% | + | + | 1.2 Diethylbenzene | + | + | Phenylhydrazine | + | + |
| Ammonia, 20-30% | т | + | Diethylene glycol | + | + | Phosphoric acid, 85% | + | + |
| Ammonium chloride | + | | Dimethyl sulfoxide (DMSO) | + | + | Phosphoric acid, 85% + Sulfuric acid, 98%, 1:1 | | + |
| | | | Dimethylaniline | | + | Piperidine | + | |
| Ammonium fluoride | + | | | + | | | + | + |
| Ammonium sulfate | + | | Dimethylformamide (DMF) | + | + | Potassium chloride | + | |
| n-Amyl acetate | + | + | 1.4 Dioxane | | + | Potassium dichromate | + | |
| Amyl alcohol (Pentanol) | + | + | Diphenyl ether | + | + | Potassium hydroxide | + | |
| Amyl chloride (Chloropentane) | | + | Essential Oil | | + | Potassium permanganate | + | |
| Aniline | + | + | Ethanol | + | + | Propionic acid | + | + |
| Barium chloride | + | | Ethanolamine | + | + | Propylene glycol (Propanediol) | + | + |
| Benzaldehyde | + | + | Ethyl acetate | + | + | Pyridine | + | + |
| Benzene (Benzol) | + | + | Ethylbenzene | | + | Pyruvic acid | + | + |
| Benzine (Petroleum benzin), bp 70-180 °C | | + | Ethylene chloride | | + | Salicylaldehyde | + | + |
| Benzoyl chloride | + | + | Fluoroacetic acid | | + | Scintilation fluid | + | + |
| Benzyl alcohol | + | + | Formaldehyde, 40% | + | | Silver acetate | + | |
| Benzylamine | + | + | Formamide | + | + | Silver nitrate | + | |
| Benzylchloride | + | + | Formic acid, 100% | | + | Sodium acetate | + | |
| Boric acid, 10% | + | + | Glycerol | + | + | Sodium chloride | + | |
| Bromobenzene | + | + | Glycol (Ethylene glycol) | + | + | Sodium dichromate | + | |
| Bromonaphthalene | + | + | Glycolic acid, 50% | + | | Sodium fluoride | + | |
| Butanediol | + | + | Heating oil (Diesel oil), bp 250-350°C | | + | Sodium hydroxide, 30% | + | |
| 1-Butanol | + | + | Heptane | | + | Sodium hypochlorite | + | |
| n-Butyl acetate | + | + | Hexane | | + | Sulfuric acid, 98% | + | + |
| Butyl methyl ether | + | + | Hexanoic acid | + | + | Tartaric acid | + | |
| Butylamine | + | + | Hexanol | + | + | Tetrachloroethylene | ' | + |
| Butyric acid | + | + | Hydriodic acid | + | + | Tetrahydrofuran (THF) */ ** | | + |
| Calcium carbonate | + | Т | Hydrobromic acid | Т | + | Tetramethylammonium hydroxide | + | |
| Calcium chloride | | | Hydrochloric acid, 20% | | + | Toluene | Т | + |
| | + | | Hydrochloric acid, 20-37% | + | + | Trichloroacetic acid | | + |
| Calcium hydroxide | | | | | | | | |
| Calcium hypochlorite | + | | Hydrogen peroxide, 35% | | + | Trichlorobenzene | | + |
| Carbon tetrachloride | | + | Isoamyl alcohol | + | + | Trichloroethane | | + |
| Chloro naphthalene | + | + | Isobutanol | + | + | Trichloroethylene | | + |
| Chloroacetaldehyde, 45% | + | + | Isooctane | | + | Trichlorotrifluoro ethane | | + |
| Chloroacetic acid | + | + | Isopropanol (2-Propanol) | + | + | Triethanolamine | + | + |
| Chloroacetone | + | + | Isopropyl ether | + | + | Triethylene glycol | + | + |
| Chlorobenzene | + | + | Lactic acid | + | | Trifluoro ethane | | + |
| Chlorobutane | + | + | Methanol | + | + | Trifluoroacetic acid (TFA) | | + |
| Chloroform | | + | Methoxybenzene | + | + | Turpentine | | + |
| Chlorosulfonic acid | | + | Methyl benzoate | + | + | Urea | + | |
| Chromic acid, 50% | + | + | Methyl butyl ether | + | + | Xylene | | + |
| Chromosulfuric acid | + | | Methyl ethyl ketone | + | + | Zinc chloride, 10% | + | |
| Copper sulfate | + | | Methyl formate | + | + | Zinc sulfate, 10% | + | |
| Cresol | | + | Methyl propyl ketone | + | + | * use ETFE/PTFE bottle adapter | | |
| Cumene (Isopropyl benzene) | + | + | Methylene chloride | | + | ** use PTFE seal | | |
| cameric (Bopropy) benzene) | Т | - | meanyiene emonae | | Т | | | |

The above recommendations reflect testing completed prior to publication. Always follow instructions in the operating manual of the instrument as well as the reagent manufacturer's specifications. In addition to these chemicals, a variety of organic and inorganic saline solutions (e.g., biological buffers), biological detergents and media for cell culture can be dispensed. Should you require information on chemicals not listed, please feel free to contact BrandTech Scientific. Status as of: 0713/12

Dispensette® TA Pt-Ir

For dispensing HF, we recommend the use of the Dispensette® TA bottle-top dispenser with platinum-iridium valve spring (Cat. No. 4741041, page 37).

Dispensette® bottletop dispensers technical data

Operating limitations (all instruments)

Liquids which form deposits may make the piston difficult to move or may cause jamming (e.g., crystallizing solutions or concentrated alkaline solutions).

When dispensing inflammable media, make sure to avoid the buildup of static charge, e.g., do not dispense into plastic vessels; do not wipe instruments with a dry cloth.

The Dispensette® is designed for general laboratory applications and complies with the relevant standards, e.g., DIN EN ISO 8655. Compatibility of the instrument for a specific application (e.g., trace material analysis, food sector, etc.) must be checked by the user. Approvals for specific applications, e.g., for production and administration of food, pharmaceuticals and cosmetics are not available.

Items supplied

Each Dispensette® III, Dispensette® Organic, Dispensette® TA includes:

- Certificate of performance
- Discharge tube
- Valve Mounting/Calibration tool
- Adapters and filling tube
- Operating manual
- One-year warranty

Supplied Adapters and Filling Tubes

| Nominal | Adapter for bottle | Filling tube |
|------------------|---------------------------|--------------|
| Volume,mL | thread, mm | length, mm |
| For Dispensette® | III and Dispensette® Orga | anic (PP) |
| 0.5 | 24, 28, 33, 38 | 125-240 |
| 1, 2, 5, 10 | 28, 33, 38 | 125-240 |
| 25, 50, 100 | 33, 38 | 170-330 |
| For Dispensette® | TA | |
| 10 | 28, 33, S 40 | 125-240 |
| | | |

Limitations of use (all instruments)

This instrument is designed for dispensing liquids, observing the following physical limits:

- use between +15°C and +40°C (59°F and 104°F) of instrument and reagent
- vapor pressure up to max. 600mbar. Aspirate slowly above 300mbar, in order to prevent the liquid from boiling
- kinematic viscosity up to 500mm²/s (dynamic viscosity [mPas] = kinematic viscosity [mm²/s] x density [g/cm³])
- density: Dispensette® III/Dispensette® Organic: up to 2.2g/cm³ and Dispensette® TA up to 3.8g/cm³

Operating Exclusions – Dispensette® III

Never use the Dispensette® III with:

- liquids attacking Al₂O₃-ceramic, ETFE, FEP, PFA and PTFE (e.g., dissolved sodium azide*)
- liquids attacking borosilicate glass (e.g., hydrofluoric acid)
- liquids which are decomposed catalytically by platinum-iridium (e.g., H_2O_2)
- hydrochloric acid > 20% and nitric acid > 30%
- tetrahydrofuran
- trifluoroacetic acid
- explosive liquids (e.g., carbon disulfide)
- suspensions (e.g., of charcoal) as solid particles may clog or damage the instrument
- liquids attacking PP (screw cap)

Operating Exclusions – Dispensette® Organic

Never use the Dispensette® Organic with:

- liquids attacking Al₂O₃-ceramic, tantalum, ETFE, FEP, PFA and PTFE (e.g., dissolved sodium azide*)
- liquids attacking borosilicate glass (e.g.,hydrofluoric acid)
- bases and saline solutions
- explosive liquids (e.g., carbon disulfide)
- suspensions (e.g., of charcoal) as solid particles may clog or damage the instrument
- liquids attacking PP (screw cap)

Operating limits and exclusions – Dispensette® TA

Never use the Dispensette® TA with:

- liquids attacking Al₂O₃ sapphire or fluoroplastics like ETFE, FEP, PFA and PTFE (e.g., dissolved sodium azide*)
- liquids which are decomposed catalytically by platinum-iridium (e.g., H_2O_2) or tantalum, depending on the construction of the instrument
- organic solvents
- trifluoroacetic acid
- explosive liquids (e.g., carbon disulfide)
- suspensions (e.g., of charcoal) as solid particles may clog or damage the instrument
- The Dispensette®TA must not be autoclaved

^{*}Dissolved sodium azide permitted up to a concentration of max 0.1%

ORDERING INFORMATION

| Dispensette | e [®] III | | | | | Without Safet | yPrime™ valve | With Safet | yPrime™ valve |
|-------------|--------------------------------|----------|-----------|-----|--------------|---------------|----------------|------------|---------------|
| | | , | A* < ± | C/ | √ * ≤ | | 2014 | | 2014 |
| Volume, mL | Increments, mL | % | μL | % | μL | Cat. No. | List Price | Cat. No. | List Price |
| Dispensette | [®] III, Digital Eas | sy Calib | ration™ | | | | | | |
| 0.2-2 | 0.01 | 0.5 | 10 | 0.1 | 2 | 4701320 | \$472.00 | 4701321 | \$514.00 |
| 0.5-5 | 0.02 | 0.5 | 25 | 0.1 | 5 | 4701330 | 472.00 | 4701331 | 514.00 |
| 1-10 | 0.05 | 0.5 | 50 | 0.1 | 10 | 4701340 | 472.00 | 4701341 | 514.00 |
| 2.5-25 | 0.1 | 0.5 | 125 | 0.1 | 25 | 4701350 | 646.00 | 4701351 | 682.00 |
| 5-50 | 0.2 | 0.5 | 250 | 0.1 | 50 | 4701360 | 657.00 | 4701361 | 693.00 |
| Dispensette | e® III, Analog-ad | justable | ! | | | | | | |
| 0.05-0.5 | 0.01 | 1.0 | 5 | 0.2 | 1 | 4701100 | 419.00 | 4701101 | 441.00 |
| 0.2-2 | 0.05 | 0.5 | 10 | 0.1 | 2 | 4701120 | 419.00 | 4701121 | 441.00 |
| 0.5-5 | 0.1 | 0.5 | 25 | 0.1 | 5 | 4701130 | 419.00 | 4701131 | 441.00 |
| 1-10 | 0.2 | 0.5 | 50 | 0.1 | 10 | 4701140 | 419.00 | 4701141 | 441.00 |
| 2.5-25 | 0.5 | 0.5 | 125 | 0.1 | 25 | 4701150 | 588.00 | 4701151 | 615.00 |
| 5-50 | 1.0 | 0.5 | 250 | 0.1 | 50 | 4701160 | 605.00 | 4701161 | 629.00 |
| 10-100 | 1.0 | 0.5 | 500 | 0.1 | 100 | 4701170 | 935.00 | 4701171 | 966.00 |
| Dispensette | e [®] III, Fixed-volu | | | | | | | | |
| 1 | | 0.5 | 5 | 0.1 | 1 | 4701210 | 419.00 | 4701211 | 441.00 |
| 2 | | 0.5 | 10 | 0.1 | 2 | 4701220 | 419.00 | 4701221 | 441.00 |
| 5 | | 0.5 | 25 | 0.1 | 5 | 4701230 | 419.00 | 4701231 | 441.00 |
| 10 | | 0.5 | 50 | 0.1 | 10 | 4701240 | 419.00 | 4701241 | 441.00 |
| Dispensette | e® Organic | | | | | Without Safe | tyPrime™ valve | With Safet | yPrime™ valve |
| | | A* | < ± | C/ | √ * ≤ | | 2014 | | 2014 |
| Volume, mL | Increments, mL | % | μL | % | μL | Cat. No. | List Price | Cat. No. | List Price |
| Dispensette | [®] Organic, Digi | tal Easy | Calibrati | on™ | | | | | |
| 0.5-5 | 0.02 | 0.5 | 25 | 0.1 | 5 | 4731330 | \$514.00 | 4731331 | \$542.00 |
| 1-10 | 0.05 | 0.5 | 50 | 0.1 | 10 | 4731340 | 514.00 | 4731341 | 542.00 |
| 2.5-25 | 0.1 | 0.5 | 125 | 0.1 | 25 | 4731350 | 690.00 | 4731351 | 710.00 |
| 5-50 | 0.2 | 0.5 | 250 | 0.1 | 50 | 4731360 | 714.00 | 4731361 | 742.00 |
| Dispensette | e® Organic, Anal | log-adju | stable | | | | | | |
| 0.5-5 | 0.1 | 0.5 | 25 | 0.1 | 5 | 4731130 | 462.00 | 4731131 | 472.00 |
| 1-10 | 0.2 | 0.5 | 50 | 0.1 | 10 | 4731140 | 462.00 | 4731141 | 472.00 |
| 2.5-25 | 0.5 | 0.5 | 125 | 0.1 | 25 | 4731150 | 647.00 | 4731151 | 657.00 |
| 5-50 | 1.0 | 0.5 | 250 | 0.1 | 50 | 4731160 | 657.00 | 4731161 | 668.00 |
| 10-100 | 1.0 | 0.5 | 500 | 0.1 | 100 | 4731170 | 1,015.00 | 4731171 | 1,035.00 |



Dispensette® III Digital Easy Calibration™



Dispensette® Organic Digital Easy Calibration™

| Dispensette® | TA | | | | | | With Safet | Prime™ valve |
|--------------|---------------------|-----------------|------|-----|-----|-----|------------|--------------|
| | | | A* < | ± % | CV* | ≤ % | | 2014 |
| Volume, mL | Valve Spring | Subdivision, mL | % | μL | % | μL | Cat. No. | List Price |
| Dispenset | te® TA, Analog-adjı | ustable | | | | | | |
| 1-10 | Platinum-iridium | 0.2 | 0.5 | 50 | 0.1 | 10 | 4741041 | \$1,090.00 |
| 1-10 | Tantalum | 0.2 | 0.5 | 50 | 0.1 | 10 | 4741241 | 1,090.00 |

^{*} The value of accuracy and coefficient of variation are final test values referring to the delivered nominal volume, instrument and distilled water at equilibrium with ambient temperature (20°C/68°F) and with smooth operation.

A*=Accuracy, CV*=Coefficient of Variation



Dispensette® TA with Safety Prime™ Valve

Dispensette® Accessories



| For Disp. III ◆ cap | | | | |
|--------------------------------------|----------|------------|----------|-------------------------|
| Discharge tube with integrated valve | Shape | Length, mm | Cat. No. | 2014 List Price/each |
| For Nominal Volume, mL | | | | |
| 0.5, 1, 2, 5, 10 | fine tip | 90 | 707915 | \$58.00 |
| 5, 10 | standard | 90 | 707916 | 54.00 |
| 25, 50, 100 | standard | 120 | 707917 | 54.00 |
| 25, 50, 100 | fine tip | 120 | 707918 | 54.00 |



| For Disp. Organic 🔷 cap | | | | |
|--------------------------------------|----------|------------|----------|-------------------------|
| Discharge tube with integrated valve | Shape | Length, mm | Cat. No. | 2014 List Price/each |
| For Nominal Volume, mL | • | · · | | |
| 0.5, 1, 2, 5, 10 | fine tip | 90 | 707935 | \$58.00 |
| 5, 10 | standard | 90 | 707936 | 55.00 |
| 25, 50, 100 | standard | 120 | 707937 | 64.00 |
| 25, 50, 100 | fine tip | 120 | 707938 | 64.00 |



| For Disp. TA 🔷 cap | | | | | |
|--------------------------------------|----------|------------|---------------------|----------------|-------------------------|
| Discharge tube with integrated valve | Shape | Length, mm | Cat. No. Pt - Ir | Cat. No Ta. | 2014 List Price/each |
| For Nominal Volume, mL | ' | 0 , | | | |
| 5, 1, 2, 5, 10 | fine tip | 90 | 707955 | | \$78.00 |
| 5, 1, 2, 5, 10 | fine tip | 90 | | 707956 | \$78.00 |



Flexible discharge tube

Flexible discharge tube (for Dispensette® III, Dispensette® Organic)

| | 2014 |
|---|------------|
| Cat. No. | Price/each |
| PTFE, coiled, length 800mm (= 31.5") with safety handle | |
| Not suitable for use with peroxides due to platinum-iridium valve spring. For Nominal Volume, mL | |
| 1, 2, 5, 10 707925 | \$105.00 |
| 25, 50, 100 707926 | 115.00 |
| Flexible discharge tubes for Dispensette® TA NOT FOR USE WITH HF | |
| Platinum-Iridium 707945 | 237.00 |
| Tantalum 707946 | 237.00 |

Dispensette® bottletop accessories



SafetyPrime™ valves (supplied with seal & recirculation tube)

| Valve Lever | Cat. No. | 2014 List Price/each |
|-------------|------------|---|
| Red | 706081 | \$85.00 |
| Red | 706080 | 85.00 |
| Yellow | 706090 | 85.00 |
| _ | 8317 | 8.20 |
| | Red Red | Red 706081 Red 706080 Yellow 706090 |

Replacement Parts Dispensette® TA (supplied with seal & recirculation tube)

| SafetyPrime™ valves | | |
|--|--------|----------|
| Valve spring, Platinum-iridium | 706086 | \$101.00 |
| Valve spring, Tantalum | 706087 | 101.00 |
| Dispensing Cartridge with Safety Ring Nominal volume 10mL, calibrated, includes quality certificate | 707542 | 490.00 |



Valve spring, Platinum-iridium and Tantalum







Filling valve with sealing washer

| | | 2014 |
|---|-------------|------------|
| For Dispensette® III and Organic, nominal volume, mL | Cat. No. | List Price |
| 0.5 , 1, 2, 5, 10, each | 6697 | \$41.00 |
| 25, 50, 100, each | 6698 | 46.00 |
| For Dispensette® TA, each | 6622 | 81.00 |
| Filling valve with olive-shaped nozzle (for frequent autoclaving), Dispensette* | and Organic | |
| For Nominal Volume, mL | | |
| 0.5, 1, 2, 5, 10, each | 6637 | \$44.00 |
| 25, 50, 100, each | 6638 | 50.00 |
| Seals | | |
| PTFE. With sealing washer. | | |
| Pack of 5 seals each for discharge, SafetyPrime™ and filling valves. | 6696 | \$19.20 |
| Drying tube | | |
| Without drying agent, each | 707930 | \$39.00 |
| Micro filter connector assembly with Luer-slip connection | | |
| To fit 0.2µm filter for sterile dispensing. Autoclavable (photo page 36). | 704495 | \$16.80 |
| | | |

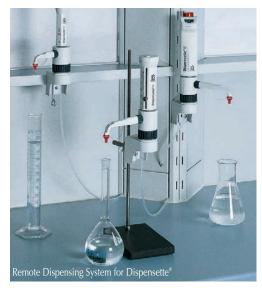
Dispensette® bottletop accessories











Telescoping filling tubes FEP

| For Nominal Volume, mL | Length, mm (inches) | Cat. No. | 2014 List Price/each |
|------------------------|--------------------------|----------|-------------------------|
| 0.5, 1, 2, 5, 10 | 70 - 140 (2.6" - 5.5") | 704202 | \$14.60 |
| 0.5, 1, 2, 5, 10 | 125 - 240 (4.9" - 9.5") | 704203 | 16.40 |
| 0.5, 1, 2, 5, 10 | 250 - 480 (9.8" - 18.9") | 704201 | 19.40 |
| 0.5, 1, 2, 5, 10 | 195-350mm (7.7"-13.8") | 704208 | 31.00 |
| 25, 50, 100 | 170 - 330 (6.7" - 13.0") | 704204 | 20.40 |
| 25, 50, 100 | 250 - 480 (9.8" - 18.9") | 704205 | 22.40 |

Amber Bottle - Ethylene-acrylate Coated

| | 2014 List |
|----------|----------------------------|
| Cat. No. | Price/each |
| 704004 | \$19.40 |
| 704006 | 26.60 |
| 704008 | 33.80 |
| 704275 | 220.00 |
| | 704004 704006 704008 |

Bottle thread adapters

| | | 2014 List | | 2014 List |
|------------------------|-------------|------------|---------------|------------|
| Bottle thread adapters | PP Cat. No. | Price/each | ETFE Cat. No. | Price/each |
| 24mm | 704325 | 17.80 | 704375 | \$18.00 |
| 28mm/S28mm | 704328 | 17.80 | 704378 | 21.40 |
| 33mm | 704396 | 17.80 | 704398 | 24.60 |
| 38mm | 704397 | 17.80 | 704399 | 24.60 |
| S40mm | 704343 | 17.80 | 704391 | 36.00 |
| Fits STJ19/32 | 704419 | 23.40 | _ | _ |
| Fits STJ24/40 | 704424 | 23.40 | _ | |
| Fits STJ29/42 | 704429 | 27.60 | _ | _ |
| | | | | |

Remote Dispensing (for Dispensette® III. Dispensette® Organic)

| Remote Dispensing (for Dispensette III, Dispensette Organi | ic) | |
|---|----------|------------|
| | | 2014 |
| | Cat. No. | Price/each |
| NOWPak® Remote Dispensing System for Dispensette® (not suitable for use with peroxides) | 704284 | 251.00 |
| | 704204 | 231.00 |
| Accessories | | |
| Filling tube, FEP, 10m, outer 7.6mm | 704267 | 211.00 |
| Filling tube, FEP, 1m, outer 6.9mm | 704269 | 19.40 |
| Thread adapter, Steel, outer thread 2", inner thread 3/4" | 704270 | 101.00 |
| Thread adapter, PTFE, inner thread 3/4" (33mm), | | |
| for direct mounting of Dispensette® on drum | 704281 | 69.00 |
| Thread adapter, PTFE, inner thread 3/4" (33mm), | | |
| to connect remote dispensing system with drums with GL outer thread | 704282 | 64.00 |
| Support rod connector, for wall mounting unit | 704268 | 60.00 |
| Table/shelf clamp, for wall mounting unit | 704272 | 28.60 |
| | | |

seripettor®

The seripettor® bottletop dispenser is an economical wiping seal dispenser suitable for many commonly used reagents in biological, clinical, medical, and chemical laboratories. It precisely dispenses a wide variety of liquids. Optional accessories, such as the flexible discharge tube, are available to increase productivity and convenience.

• Dispenses Most Non-Aggressive Liquids: The seripettor* is a low-cost, reliable tool for dispensing measured volumes of weak acids, alkaline solutions, polar solvents, isotonic solutions, methanol, and acetylacetone. See selection guide on page 47.

• **Simplifies Dispensing:** Notched volume selector allows for quick and exact volume adjustment. Spring-driven refill function enables one-handed operation.

 Convenient Cleaning and Maintenance: Innovative design permits simple disassembly and rapid replacement of wearing parts, extending instrument life.

• Fits Most Reagent Containers: The 45mm standard thread plus the included adapters with 33mm and 40mm thread fits most common lab bottles.

 Dispenses Sterile Media: Accessories are available for sterile dispensing

A Rugged, Economical Tool for Routine Dispensing.



seripettor® bottletop dispenser

Technical data

Operating limits and exclusions

Never use this instrument with:

- liquids attacking FEP, PP, PE or EPDM
- non-polar solvents like hydrocarbons and halogenated hydrocarbons
- concentrated or oxidizing acids
- explosive liquids (e.g., carbon disulfide)

This instrument is designed for dispensing liquids, observing the following limits:

- vapor pressure up to 500mbar
- density up to 2.2g/cm³
- temperature of use between 15° and 40°C (59° and 104°F of instrument and reagent) (agar cultures up to 60°C)
- viscosity

2mL instrument: 300mm²/s 10mL instrument: 150mm²/s 25mL instrument: 75mm²/s (dynamic viscosity [mPas] =

kinematic viscosity [mm²/s] x density [g/cm³])

Sterile dispensing

Optional accessories are available to make dispensing of agar and other sterile liquids quick and easy with the seripettor®. These include:

- Sterile dispensing cartridges
- Valve block cap
- Special filling tube for autoclaving
- 0.2µm membrane filter



Sterile dispensing cartridge installation.



[1] Dispensing cartridge, non-sterile



[4] Valve block cap



[2] Dispensing cartridge,



[5] 0.2µm Membrane filter



[3] Flexible discharge tube



[6] Discharge Tube

Items supplied

Each seripettor® bottletop dispenser includes:

- Spare dispensing cartridge
- Discharge tube

NEW!

- Telescoping filling tube
- · Operating manual
- Two PP adapters, 45/S40mm and 45/33mm. See page 43 for other adapters
- One-year warranty

ORDERING INFORMATION

| volume, mL | Subdivision, mL | A* < ± % | CV* ≤ % | Cat. No. | 2014 List Price |
|-------------------------|-----------------|----------|---------|----------|--------------------|
| seripettor [®] | | | | | |
| 0.2-2 | 0.04 | 1.2 | 0.2 | 4720120 | \$132.00 |
| 1-10 | 0.2 | 1.2 | 0.2 | 4720140 | 132.00 |
| 2.5-25 | 0.5 | 1.2 | 0.2 | 4720150 | 167.00 |

* The value of accuracy and coefficient of variation are final test values referring to the delivered nominal volume, instrument and distilled water at equilibrium with ambient temperature (20°C/68°F) and with smooth operation.

A*=Accuracy, CV*=Coefficient of Variation

| Description | Photo | Pack of | Cat. No. | 2014 List Price |
|--|--------|-----------|-----------|--------------------|
| Replacement Parts | 111000 | r delt of | Cata 1101 | List I IIoo |
| Dispensing cartridge, for 2mL seripettor®, non-sterile | 1 | 3 | 704500 | \$45.00 |
| Dispensing cartridge, for 10mL seripettor [®] , non-sterile | 1 | 3 | 704502 | 45.00 |
| Dispensing cartridge, for 25mL seripettor [®] , non-sterile | 1 | 3 | 704504 | 63.00 |
| Dispensing cartridge, for 2mL seripettor®, sterile | 2 | 7 | 704507 | 118.00 |
| Dispensing cartridge, for 10mL seripettor®, sterile | 2 | 7 | 704506 | 118.00 |
| Dispensing cartridge, for 25mL seripettor®, sterile | 2 | 5 | 704508 | 125.00 |
| Flexible discharge tubing for 25mL seripettor® PTFE, 800mm | 3 | 1 | 704523 | 114.00 |
| Flexible discharge tubing for 2mL & 10mL seripettor® PTFE, 800mm | 3 | 1 | 704522 | 92.00 |
| Discharge tube for 2mL seripettor® | 6 | 1 | 704518 | 28.00 |
| Discharge tube for 10mL and 25mL seripettor® | 6 | 1 | 704520 | 28.00 |
| Valve block cap for 2mL & 10mL seripettor®, PP | 4 | 1 | 704552 | 25.60 |
| Valve block cap for 25mL seripettor®, PP | 4 | 1 | 704554 | 25.60 |
| Filling tube for sterile applications, 250mm | | 1 | 704536 | 8.00 |
| Filling tube for sterile applications, 500mm | | 1 | 704538 | 11.20 |
| Membrane filter, 0.2μm, non-sterile | 5 | 10 | 26535 | 84.00 |
| Bottles & Adapters | | | | |

See detailed listing on page 43

seripettor® pro

The seripettor® pro is a bottletop dispenser designed to handle a wider range of liquids than the regular seripettor® for customers who do not require all of the features of the Dispensette®. Like the regular seripettor®, it features an easily-replaceable wiping seal dispensing cartridge, making it especially suitable for liquids that tend to form crystals.

- Wide Chemical Range: Valves and seals on the seripettor® pro allow a broader range of liquids to be dispensed than the regular seripettor®.
- Protects Light-sensitive Reagents: Pump assembly with Hastalloy stainless steel spring. An opaque upper sleeve helps protect liquid from UV-light during dispensing operations, while permitting observation of cylinder to confirm purging of bubbles.
- Replaceable Dispensing Cartridge: Quick-change cartridge makes service a breeze and keeps life-time service costs low. If wiping seals wear out, or are damaged by crystallizing reagents, just change the inexpensive cartridge, and you're back in business!
- **Telescoping Filling Tube:** Adjusts to fit many bottles without cutting.
- Discharge tube with a threaded Safety Screw Cap: Attaches and removes with a quick twist
- Spring-loaded Piston: Permits one-handed, semi-automatic operation.
- Threaded Safety Cap: Attaches and removes with a quick twist.

An Economical, Versatile Wiping-Seal Dispenser.



ORDERING INFORMATION

| | Volume, mL | Subdivision, mL | $A^* < \pm \%$ | CV* <u><</u> % | Cat. No. | 2014 List Price |
|------|-----------------|-----------------|----------------|-------------------|----------|-----------------|
| | seripettor® pro | | | | | |
| NEW! | 0.2-2 | 0.04 | 1.2 | 0.2 | 4720420 | \$332.00 |
| | 1-10 | 0.2 | 1.2 | 0.2 | 4720440 | 332.00 |
| | 2.5-25 | 0.5 | 1.2 | 0.2 | 4720450 | 474.00 |

A*=Accuracy, CV*=Coefficient of Variation







[2] Flexible discharge



[3] Telescoping filling tubes,

| Description | Photo | Pack of | Cat. No. | 2014 List Price |
|---|-------|---------|----------|--------------------|
| Dispensing cartridge | | | | |
| Dispensing cartridge, for 2mL seripettor® <i>pro</i> , non-sterile | 1 | 3 | 704500 | \$45.00 |
| Dispensing cartridge, for 10mL seripettor® <i>pro</i> , non-sterile | 1 | 3 | 704502 | 45.00 |
| Dispensing cartridge, for 25mL seripettor® <i>pro</i> , non-sterile | 1 | 3 | 704504 | 63.00 |
| Flexible discharge tube for 2mL & 10mL seripettor® <i>pro</i> | 2 | 1 | 704522 | 92.00 |
| Flexible discharge tube for 25mL seripettor® <i>pro</i> | 2 | 1 | 704523 | 114.00 |
| Discharge tube for 2mL seripettor® pro | | 1 | 707915 | 58.00 |
| Discharge tube for 10mL seripettor® pro | | 1 | 707916 | 54.00 |
| Discharge tube for 25mL seripettor® pro | | 1 | 707918 | 54.00 |
| Bottle Thread Adapters | | | | |

See detailed thread adapter listing on page 43.

Telescoping filling tubes

| For Nominal | - | | | | 2014 |
|-------------|------------------------|-------|---------|---------|------------|
| Volume, mL | Length, mm (inches) | Photo | Pack of | Cat. No | List Price |
| 2, 10 | 70 - 140 (2.6 - 5.5) | 3 | 1 | 704202 | \$14.60 |
| 2, 10 | 125 - 240 (4.9 - 9.5) | 3 | 1 | 704203 | 16.40 |
| 2, 10 | 250 - 480 (9.8 - 18.9) | 3 | 1 | 704201 | 19.40 |
| 2, 10 | 195 - 350 (7.7 - 13.8) | 3 | 1 | 704208 | 31.00 |
| 25 | 170 - 330 (6.7 - 13.0) | 3 | 1 | 704204 | 20.40 |
| 25 | 250 - 480 (9.8 - 18.9) | 3 | 1 | 704205 | 22.40 |
| | | | | | |

^{*} The value of accuracy and coefficient of variation are final test values referring to the delivered nominal volume, instrument and distilled water at equilibrium with ambient temperature (20°C/68°F) and with smooth operation.

seripettor® pro bottletop dispenser

Operating limits and exclusions

Never use this instrument with:

- liquids attacking PP, PE, Al₂O₃ ceramic, ETFE, FEP, PFA and PTFE (e.g., dissolved sodium azide*)
- liquids attacking borosilicate glass (e.g., hydrofluoric acid)
- liquids which are decomposed catalytically by platinum-iridium (e.g., H,O,)
- non-polar solvents like hydrocarbons and halogenated hydrocarbons
- concentrated or oxidizing acids (excluding HCl)
- explosive liquids (e.g., carbon disulfide)
- suspensions (e.g., of charcoal) as solid particles may clog or damage the instrument

This instrument is designed for dispensing liquids, observing the following limits:

- vapor pressure up to 500mbar
- density up to 2.2g/cm³
- temperature 15° to 40° C (59° to 104° F)
- viscosity

2mL instrument: 1300mm²/s 10mL instrument: 150mm²/s 25mL instrument: 75mm²/s (dynamic viscosity [mPas] = kinematic viscosity [mm²/s] x density [g/cm³])

Items supplied

Each seripettor® *pro* bottletop dispenser includes:

- Spare dispensing cartridge
- Discharge tube
- Telescoping filling tube
- Two PP adapters, 45/S40mm and 45/33mm. See page 43 for other adapters
- · Operating manual
- One-year warranty



Areas of application / Chemical selection list (as of January 2014)

seripettor® dispenser

seripettor® pro dispenser

| Reagent | seripettor® | seripettor pro® | Reagent | seripettor® | seripettor pro® |
|--|-------------|-----------------|--|-------------|-----------------|
| Acetaldehyde | | + | Glycol (Ethylene glycol) | + | + |
| Acetic acid, 5% | + | + | Glycolic acid, 50% | + | + |
| Acetic acid, 96% | | + | Hexanoic acid | + | + |
| Acetic acid (glacial), 100% | | + | Hexanol | | + |
| Acetone | | + | Hydriodic acid | + | + |
| Acetonitrile | | + | Hydrobromic acid | | + |
| Acetophenone | + | | Hydrochloric acid, 37% | | + |
| Acetylacetone | + | + | Hydrogen peroxide, 35% | + | |
| Acrylic acid | | + | Isoamyl alcohol | | + |
| Acrylonitrile | | + | Isobutanol | + | + |
| Adipic acid | + | + | Isopropanol (2-Propanol) | + | + |
| Agar (60°C) | + | | Lactic acid | + | + |
| Allyl alcohol | + | + | Methanol | + | + |
| Aluminium chloride | + | + | Methyl benzoate | | + |
| Amino acids | + | + | methyl ethyl ketone | | + |
| Ammonia 30% | + | + | Methyl propyl ketone | | + |
| Ammonium chloride | + | + | Mineral oil (Engine oil) | | + |
| Ammonium fluoride | + | + | Monochloroacetic acid | | + |
| Ammonium sulfate | + | + | Nitric acid, 10% | | + |
| Amyl alcohol (Pentanol) | + | + | Oxalic acid | + | + |
| n-Amyl acetate | ' | + | Perchloric acid | ' | + |
| Aniline | | + | Phenol | | + |
| Barium chloride | + | + | Phosphoric acid, 85% | | + |
| Benzaldehvde | т т | + | Piperidine | | + |
| Benzyl alcohol | | + | Potassium chloride | + | + |
| Benzylamine | | + | Potassium dichromate | + | + |
| Benzylchloride | | + | Potassium hydroxide | + | + |
| Boric acid, 10% | + | + | Potassium hydroxide in ethanol | + | + |
| Butanediol | + | + | Potassium permanganate | + | + |
| 1-Butanol | т т | + | Propionic acid | + | + |
| Butylamine | | + | Propvlene glycol (Propanediol) | + | + |
| n-Butyl acetate | | | Pvridine | + | |
| Calcium carbonate | | + | Pyruvic acid | | + |
| Calcium chloride | + | + | Salicylaldehyde | + | + |
| Calcium hydroxide | + | + | Salicylic acid | | + |
| | + | + | | + | + |
| Calcium hypochlorite Chloroacetaldehyde, 45% | | + | Silver acetate | + | + |
| Chloroacetic acid | | + | Silver nitrate | + | + |
| | | + | Sodium acetate | + | + |
| Chromic acid, 50% | | + | Sodium chloride Sodium dichromate | + | + |
| Copper sulfate Cumene (Isopropyl benzene) | + | + | Sodium dichromate Sodium fluoride | + | + |
| | | + | | + | + |
| Diethylene glycol | + | + | Sodium hydroxide, 30% | + | + |
| Dimethyl sulfoxide (DMSO) | | + | Sodium hypochlorite (active Chlorine approx. 10% | | + |
| Dimethylaniline | | + | Sulfuric acid, 10% | + | + |
| Ethanol | + | + | Tartaric acid | | + |
| Formaldehyde, 40% | + | + | Urea | + | + |
| Formamide | + | + | Zinc chloride, 10% | + | + |
| Formic acid, 100% | | + | zinc sulfate,10% | + | + |
| Glycerol | + | + | · | | |

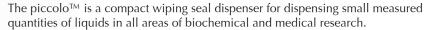
The above recommendations reflect testing completed prior to publication. Always follow instructions in the operating manual of the instrument as well as the reagent manufacturer's specifications. In addition to these chemicals, a variety of organic and inorganic saline solutions (e.g., biological buffers), biological detergents and media for cell culture can be dispensed. Should you require information on chemicals not listed, please feel free to contact BrandTech. Status as of: 0114/9.

NOTE: The seripettor® & seripettor® *pro* bottletop dispensers cannot be used with hydrofluoric acid (HF). See page 37 of the BrandTech 2014/2015 catalog for description of the Dispensette® TA Pt-Ir dispenser which is the only BRAND dispenser designed for use with HF.

For the most current version of this chart, visit our website www.brandtech.com.

^{*}Dissolved sodium azide permitted up to a max. of 0.1%

piccolo™



Made from high quality materials, its small size and semi-automatic operation make it a natural for standardized procedures and kits where small volumes of reagents need to be dispensed. The spring loaded piston design enables onehanded operation.

The piccolo™ comes in two versions: The piccolo™ 1 is a fixed volume instrument, while **piccolo™** 2 model has two preset volumes.

Never use the piccolo™ with aggressive media. The piccolo™ is especially designed for applications in connection with aqueous and highly diluted agents.

All piccolo™ instruments are supplied with a GL 28 thread, valve mounting tool, 150mm filling tube and operating manual.



| Instrument type | Volume setting(s), μL | A* ≤±% | CV* ≤% | Cat. No. | 2014 List Price |
|-----------------|-----------------------|--------|--------|----------|--------------------|
| piccolo™ 1 | 100 | 3.0 | 0.4 | V1610501 | \$399.00 |
| piccolo I | 100 | 3.0 | 0.4 | V1010301 | \$399.00 |
| piccolo™ 1 | 200 | 2.5 | 0.4 | V1610502 | 399.00 |
| piccolo™ 1 | 250 | 2.0 | 0.4 | V1610503 | 399.00 |
| piccolo™ 1 | 500 | 1.5 | 0.3 | V1610504 | 399.00 |
| piccolo™ 1 | 1000 | 1.0 | 0.2 | V1610506 | 399.00 |
| piccolo™ 2 | 100 / 250 | 2.0 | 0.4 | V1611503 | 450.00 |
| piccolo™ 2 | 500 / 1000 | 1.0 | 0.2 | V1611506 | 450.00 |
| piccolo™ 2 | 1000 / 2000 | 1.0 | 0.2 | V1611508 | 450.00 |

A*=Accuracy, CV*=coefficient of variation according to DIN EN ISO 8655-5 Other volumes are available upon request.

An adapter is available to mount the piccolo™ to GL 32/33mm threaded bottles. Inquire about other thread adapters for the piccolo™.

ORDERING INFORMATION

| Description | Dispenser Thread | Bottle thread | Cat. No. | 2014 List Price |
|-------------------------|------------------|---------------|----------|--------------------|
| piccolo™ thread adapter | GL28 | GL32 | V1670145 | \$23.40 |

