

Dispensette® S bottletop dispensers build on the fifty year history of BRAND® dispensing expertise. Continual upgrades makes this the safest and most convenient bottletop dispenser ever, all while retaining the features that make the Dispensette® the world's favorite bottletop dispenser. The Dispensette® S mounts directly on most solvent and reagent bottles for faster, more convenient dispensing. Instruments are autoclavable at 121 °C for use with sterile reagents.

- **Dispense most lab reagents**—Choose the Dispensette® S for acids, bases, and saline solutions, as well as many organic solvents; the Dispensette® S Organic for organic solvents, including combinatorial chemistry solvents, concentrated acids such as HCl and HNO₃, trifluoroacetic acid (TFA), tetrahydrofuran (THF), and peroxides. See Selection Chart on page 42 for help choosing the best dispenser.
- **Deliver accurate, precise volumes**—Dispensers are accurate to 0.5% (0.6% for 1 mL models), with coefficients of variation of 0.1% (0.2% for 1 mL). Digital models feature accurate and reproducible volume settings via a mechanical digital display.
- **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. Recirculation 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. The system eliminates seals for a lifetime of reliable dispensing.
- **HF and trace analysis dispensing**—For dispensing of high purity acids and solvents, or hydrofluoric acid, choose the Dispensette® S Trace Analysis. For details, see page 41.



The standard in bottletop dispensing for a half century



Dispensette® S Bottletop Dispensers

Easy Calibration™ technique

Adjustments according to ISO 9001
and GLP done within seconds

Discharge valve with safety ball

Closes when discharge tube is not mounted
to prevent accidental dispensing

Large window

Allows easy priming verification

Hinged screw cap

Swings out of the way when dispensing

Threaded safety cap

Coarse thread allows fingertip on/off

Dispensette® S Organic Digital
without recirculation valve

Dispensette® S Analog-adjustable with
recirculation valve



Calibration mechanism

Visible flag indicates calibration
has been adjusted from
factory specifications

Volume selection

With scalloped track for
reproducible volume setting

Recirculation Valve

Eliminates reagent waste and
splashing during priming

Freely rotating valve block

Allows bottle label to
always face user

Olive-shaped filling valve

For firm filling tube attachment

Recirculation tube

Safely returns reagent
to the bottle

Telescoping filling tube

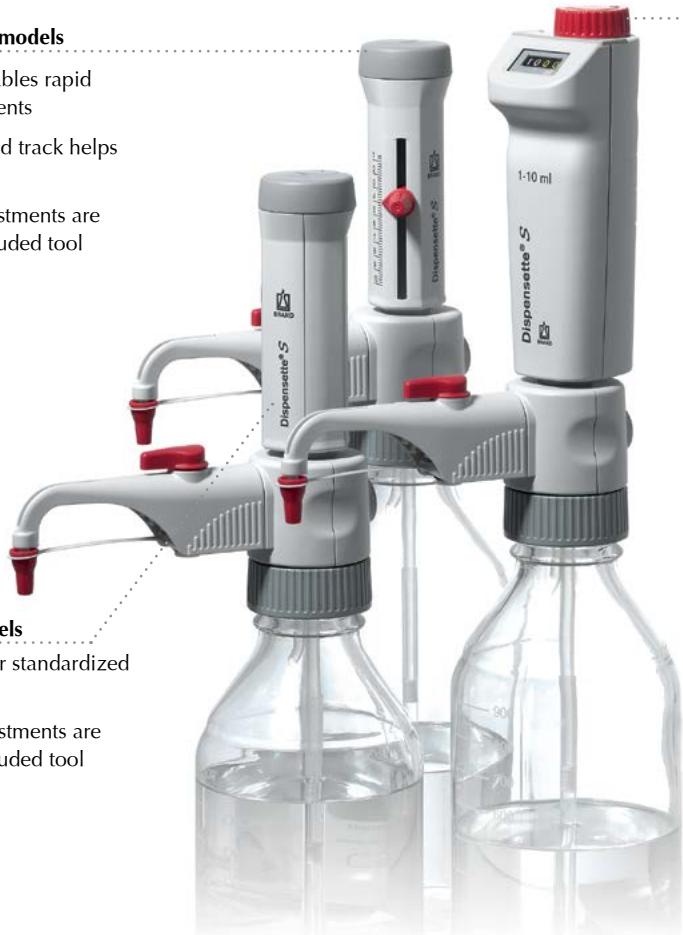
Adjusts easily to a broad range
of bottle sizes with no measuring
or cutting required

Dispensette® S Bottletop Dispensers

Dispensette® S Volume Adjustment

Analog-adjustable models

- Analog slide enables rapid volume adjustments
- Internal scalloped track helps secure setting
- Calibration adjustments are simple with included tool



Fixed-volume models

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

Digital models

- Enable accurate and reproducible volume setting with an easy-to-read display and a convenient adjustment knob.
- Mechanical adjustment mechanism displays the volume in digits
- Features unique Easy Calibration™ technology (see page 58) for calibration adjustment in seconds without tools
- Excellent for labs with multiple users, requiring frequent volume changes to specific volumes

Product Features

Both the Dispensette® S and Dispensette® S Organic are constructed using the “floating piston” principle.

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

- The GL45 mm 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.
- The valves are replaceable for simple, economical service.
- The valve design eliminates seals for trouble-free operation.
- The Dispensette® S and Dispensette® S 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.

Dispensette® S Bottletop Dispensers

Applications



One-handed operation

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



Dispensing sterile fluids

Dispensette® S and Dispensette® S Organic bottletop dispensers are autoclavable at 121 °C 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. Integrated recirculation valve helps purge bubbles before use.



Dispensing sensitive reagents

Optional drying tube screws into the accessory port of the Dispensette® S 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® S or Dispensette® S Organic to the optional Remote Dispensing System for accurate dispensing from drums and other bulk containers up to 10 meters 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 recirculation valve, pressurized vessels, peroxides (which will react with the platinum-iridium 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 your specific operating manual of the Dispensette® S bottletop dispenser model.



Remote Dispensing System

Dispensette® S Trace Analysis

For dispensing high-purity chemicals

The Dispensette® S Trace Analysis bottletop dispenser provides outstanding performance for precise-volume dispensing of high-purity media for trace analysis. The Dispensette® S Trace Analysis is also suitable for dispensing HF (Pt-Ir valve spring 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 (Pt-Ir) or tantalum (Ta) valve springs can be chosen. The volume range is from 1 to 10 mL.

- Especially well-suited for dispensing acids, bases and hydrogen peroxide (Tantalum (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, PCTFE, 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

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

+ suitable – not suitable

* 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.

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: 05/17/2



The high-purity materials release virtually no metal ions after appropriate cleaning. This makes the Dispensette® S Trace Analysis 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. Integrated recirculation valve helps purge bubbles before dispensing.

Performing trace analysis?

See the VITLAB® PFA trace analysis labware on page 116

Areas of Application / Suggested Dispenser

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

| Reagent | Disp. S | Disp. S Organic | Reagent | Disp. S | Disp. S Organic | Reagent | Disp. S | Disp. S Organic |
|--|---------|--------------------|---|---------|--------------------|--|---------|--------------------|
| Acetaldehyde | + | + | Cyclohexane | + | + | Methylene chloride | + | + |
| Acetic acid (glacial), 100% | + | + | Cyclohexanone | + | + | Mineral oil (Engine oil) | + | + |
| Acetic acid, ≤ 96% | + | + | Cyclopentane | + | + | Monochloroacetic acid | + | + |
| Acetic anhydride | + | | Decane | + | + | Nitric acid, ≤ 30% | + | + |
| Acetone | + | + | 1-Decanol | + | + | Nitric acid, 30-70% */** | + | + |
| Acetonitrile | + | + | Dibenzyl ether | + | + | Nitrobenzene | + | + |
| Acetophenone | + | | Dichloroacetic acid | + | + | Oleic acid | + | + |
| Acetyl chloride | + | | Dichlorobenzene | + | + | Oxalic acid | + | |
| Acetylacetone | + | + | Dichloroethane | + | + | n-Pentane | | + |
| Acrylic acid | + | + | Dichloroethylene | + | + | Peracetic acid | | + |
| Acrylonitrile | + | + | Dichlormethane | + | + | Perchloric acid | + | + |
| Adipic acid | + | | Diesel oil (Heating oil), bp 250-350 °C | + | + | Perchloroethylene | | + |
| Allyl alcohol | + | + | Diethanolamine | + | + | Petroleum, bp 180-220 °C | | + |
| Aluminium chloride | + | | Diethyl ether | + | + | Petroleum ether, bp 40-70 °C | | + |
| Amino acids | + | | Diethylamine | + | + | Phenol | + | + |
| Ammonia, ≤ 20% | + | + | 1,2 Diethylbenzene | + | + | Phenylethanol | + | + |
| Ammonia, 20-30% | + | | Diethylene glycol | + | + | Phenylhydrazine | + | + |
| Ammonium chloride | + | | Dimethyl sulfoxide (DMSO) | + | + | Phosphoric acid, ≤ 85% | + | + |
| Ammonium fluoride | + | | Dimethylaniline | + | | Phosphoric acid, 85% + Sulfuric acid, 98%, 1:1 | + | + |
| Ammonium sulfate | + | | Dimethylformamide (DMF) | + | + | Piperidine | + | + |
| n-Amyl acetate | + | + | 1,4 Dioxane | + | + | Potassium chloride | | + |
| Amyl alcohol (Pentanol) | + | + | Diphenyl ether | + | + | Potassium dichromate | + | |
| Amyl chloride (Chloropentane) | + | | Essential oil | + | + | Potassium hydroxide | + | |
| Aniline | + | + | Ethanol | + | + | Potassium permanganate | + | |
| Barium chloride | + | | Ethanolamine | + | + | Propionic acid | + | + |
| Benzaldehyde | + | + | Ethyl acetate | + | + | Propylene glycol (Propanediol) | + | + |
| Benzene (Benzol) | + | + | Ethylbenzene | + | + | Pyridine | + | + |
| Benzine (Petroleum benzin), bp 70-180 °C | + | | Ethylene chloride | + | + | Pyruvic acid | + | + |
| Benzoyl chloride | + | + | Fluoroacetic acid | + | + | Salicylaldehyde | + | + |
| Benzyl alcohol | + | + | Formaldehyde, ≤ 40% | + | + | Scintillation fluid | + | + |
| Benzylamine | + | + | Formamide | + | + | Silver acetate | | + |
| Benzylchloride | + | + | Formic acid, ≤ 100% | + | + | Silver nitrate | | + |
| Boric acid, ≤ 10% | + | + | Glycerol | + | + | Sodium acetate | | + |
| Bromobenzene | + | + | Glycol (Ethylene glycol) | + | + | Sodium chloride | | + |
| Bromonaphthalene | + | + | Glycolic acid, ≤ 50% | + | + | Sodium dichromate | | + |
| Butanediol | + | + | Heating oil (Diesel oil), bp 250-350 °C | + | + | Sodium fluoride | | + |
| 1-Butanol | + | + | Heptane | + | + | Sodium hydroxide, ≤ 30% | + | |
| n-Butyl acetate | + | + | Hexane | + | + | Sodium hypochlorite | | + |
| Butyl methyl ether | + | + | Hexanoic acid | + | + | Sulfuric acid, ≤ 98% | + | + |
| Butylamine | + | + | Hexanol | + | + | Tartaric acid | | + |
| Butyric acid | + | + | Hydroiodic acid, ≤ 57% ** | + | + | Tetrachloroethylene | | + |
| Calcium carbonate | + | | Hydrobromic acid | + | + | Tetrahydrofuran (THF) * / ** | | + |
| Calcium chloride | + | | Hydrochloric acid, ≤ 20% | + | + | Tetramethylammonium hydroxide | + | |
| Calcium hydroxide | + | | Hydrochloric acid, 20-37% ** | + | + | Toluene | | + |
| Calcium hypochlorite | + | | Hydrogen peroxide, ≤ 35% | + | + | Trichloroacetic acid | | + |
| Carbon tetrachloride | + | | Isoamyl alcohol | + | + | Trichlorobenzene | | + |
| Chloro naphthalene | + | + | Isobutanol | + | + | Trichloroethane | | + |
| Chloroacetaldehyde, ≤ 45% | + | + | Isooctane | + | + | Trichloroethylene | | + |
| Chloroacetic acid | + | + | Isopropanol (2-Propanol) | + | + | Trichlorotrifluoro ethane | | + |
| Chloroacetone | + | + | Isopropyl ether | + | + | Triethanolamine | + | + |
| Chlorobenzene | + | + | Lactic acid | + | + | Triethylene glycol | + | + |
| Chlorobutane | + | + | Methanol | + | + | Trifluoro ethane | | + |
| Chloroform | + | | Methoxybenzene | + | + | Trifluoroacetic acid (TFA) | | + |
| Chlorosulfonic acid | + | | Methyl benzoate | + | + | Turpentine | | + |
| Chromic acid, ≤ 50% | + | + | Methyl butyl ether | + | + | Urea | + | |
| Chromosulfuric acid | + | | Methyl ethyl ketone | + | + | Xylene | | + |
| Copper sulfate | + | | Methyl formate | + | + | Zinc chloride, ≤ 10% | + | |
| Cresol | | + | Methyl propyl ketone | + | + | Zinc sulfate, ≤ 10% | + | |
| Cumene (Isopropyl benzene) | + | + | | | | | | |

* Choose ETFE/PTFE adapters, if required, ** use PTFE seal for valve block catalog number #704486

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: 0218/13

Note:

For dispensing HF, we recommend the use of the Dispensette® S Trace Analysis bottletop dispenser with platinum-iridium valve spring (See page 41).

Dispensette® S Bottletop Dispenser 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® S,
Dispensette® S Organic,
Dispensette® S Trace Analysis includes:

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

Supplied adapters & filling tubes

| Nominal Volume, mL | Adapter for bottle thread, mm | Filling tube length, mm |
|---|-------------------------------|-------------------------|
| For Dispensette® S & Dispensette® S Organic (PP) | | |

| | | |
|-------------|---------------------|---------|
| 1, 2, 5, 10 | 24, 28, 33, 38, S40 | 125-240 |
| 25, 50, 100 | 33, 38, S40 | 170-330 |

For Dispensette® S Trace Analysis (ETFE, PTFE*)

| | | |
|----|------------------|---------|
| 10 | 28, 33, 38, S40* | 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 (instrument and reagent)
- Vapor pressure up to max. 600 mbar (Aspirate slowly above 300 mbar, in order to prevent the liquid from boiling)
- Kinematic viscosity up to 500 mm²/s (dynamic viscosity [mPas] = kinematic viscosity [mm²/s] x density [g/cm³])
- Density—Dispensette® S/Dispensette® S Organic—up to 2.2 g/cm³ and Dispensette® S Trace Analysis up to 3.8 g/cm³

Operating exclusions – Dispensette® S

Never use the Dispensette® S with:

- Liquids which attack Al₂O₃-ceramic, ETFE, FEP, PFA and PTFE (e.g., dissolved sodium azide*)
- Liquids which attack borosilicate glass (e.g., hydrofluoric acid)
- Liquids which are decomposed catalytically by platinum-iridium (e.g., H₂O₂)
- 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® S Organic

Never use the Dispensette® S Organic with:

- Liquids which attack Al₂O₃-ceramic, tantalum, ETFE, FEP, PFA and PTFE (e.g., dissolved sodium azide*)
- Liquids which attack 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 exclusions – Dispensette® S Trace Analysis

Never use the Dispensette® S Trace Analysis with:

- Liquids which attack Al₂O₃ sapphire or fluoroplastics like ETFE, FEP, PFA, PCTFE, PTFA and PTFE (e.g., dissolved sodium azide*)
- Liquids which are decomposed catalytically by platinum-iridium (e.g., H₂O₂) 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® S Trace Analysis must not be autoclaved

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

Dispensette® S Bottletop Dispensers

| | | | | | | | | Without recirculation valve | | With recirculation valve | |
|---|------------------|-----|-----|-----|-----|-------------------------|-----------------|------------------------------------|-----------------|---------------------------------|--|
| | | | | | | | | A* < ± | CV* ≤ | | |
| Volume, mL | Increments, mL | % | µL | % | µL | Cat. No. | 2021 List Price | Cat. No. | 2021 List Price | | |
| Dispensette® S, Digital | | | | | | | | | | | |
| 0.1-1 | 0.005 | 0.6 | 6 | 0.2 | 2 | 4600310 | \$534.80 | 4600311 | \$568.00 | | |
| 0.2-2 | 0.01 | 0.5 | 10 | 0.1 | 2 | 4600320 | 534.80 | 4600321 | 568.00 | | |
| 0.5-5 | 0.02 | 0.5 | 25 | 0.1 | 5 | 4600330 | 534.80 | 4600331 | 568.00 | | |
| 1-10 | 0.05 | 0.5 | 50 | 0.1 | 10 | 4600340 | 534.80 | 4600341 | 568.00 | | |
| 2.5-25 | 0.1 | 0.5 | 125 | 0.1 | 25 | 4600350 | 722.20 | 4600351 | 755.40 | | |
| 5-50 | 0.2 | 0.5 | 250 | 0.1 | 50 | 4600360 | 732.80 | 4600361 | 766.00 | | |
| Dispensette® S, Analog-adjustable | | | | | | | | | | | |
| 0.1-1 | 0.02 | 0.6 | 6 | 0.2 | 2 | 4600100 | 468.80 | 4600101 | 490.00 | | |
| 0.2-2 | 0.05 | 0.5 | 10 | 0.1 | 2 | 4600120 | 468.80 | 4600121 | 490.00 | | |
| 0.5-5 | 0.1 | 0.5 | 25 | 0.1 | 5 | 4600130 | 468.80 | 4600131 | 490.00 | | |
| 1-10 | 0.2 | 0.5 | 50 | 0.1 | 10 | 4600140 | 468.80 | 4600141 | 490.00 | | |
| 2.5-25 | 0.5 | 0.5 | 125 | 0.1 | 25 | 4600150 | 656.20 | 4600151 | 677.60 | | |
| 5-50 | 1.0 | 0.5 | 250 | 0.1 | 50 | 4600160 | 672.20 | 4600161 | 694.40 | | |
| 10-100 | 1.0 | 0.5 | 500 | 0.1 | 100 | 4600170 | 1,047.20 | 4600171 | 1,069.60 | | |
| Dispensette® S, Fixed-volume | | | | | | | | | | | |
| 1 | | 0.6 | 6 | 0.2 | 2 | 4600210 | 468.80 | 4600211 | 490.00 | | |
| 2 | | 0.5 | 10 | 0.1 | 2 | 4600220 | 468.80 | 4600221 | 490.00 | | |
| 5 | | 0.5 | 25 | 0.1 | 5 | 4600230 | 468.80 | 4600231 | 490.00 | | |
| 10 | | 0.5 | 50 | 0.1 | 10 | 4600240 | 468.80 | 4600241 | 490.00 | | |
| | | | | | | | | Without recirculation valve | | With recirculation valve | |
| | | | | | | | | A* < ± | CV* ≤ | | |
| Volume, mL | Increments, mL | % | µL | % | µL | Cat. No. | 2021 List Price | Cat. No. | 2021 List Price | | |
| Dispensette® S Organic, Digital | | | | | | | | | | | |
| 0.5-5 | 0.02 | 0.5 | 25 | 0.1 | 5 | 4630330 | \$589.40 | 4630331 | \$622.20 | | |
| 1-10 | 0.05 | 0.5 | 50 | 0.1 | 10 | 4630340 | 589.40 | 4630341 | 622.20 | | |
| 2.5-25 | 0.1 | 0.5 | 125 | 0.1 | 25 | 4630350 | 793.80 | 4630351 | 826.60 | | |
| 5-50 | 0.2 | 0.5 | 250 | 0.1 | 50 | 4630360 | 809.60 | 4630361 | 842.60 | | |
| Dispensette® S Organic, Analog-adjustable | | | | | | | | | | | |
| 0.5-5 | 0.1 | 0.5 | 25 | 0.1 | 5 | 4630130 | 507.00 | 4630131 | 540.20 | | |
| 1-10 | 0.2 | 0.5 | 50 | 0.1 | 10 | 4630140 | 507.00 | 4630141 | 540.20 | | |
| 2.5-25 | 0.5 | 0.5 | 125 | 0.1 | 25 | 4630150 | 710.40 | 4630151 | 743.60 | | |
| 5-50 | 1.0 | 0.5 | 250 | 0.1 | 50 | 4630160 | 727.80 | 4630161 | 760.60 | | |
| 10-100 | 1.0 | 0.5 | 500 | 0.1 | 100 | 4630170 | 1,141.00 | 4630171 | 1,174.20 | | |
| | | | | | | | | Without recirculation valve | | With recirculation valve | |
| | | | | | | | | A* < ± | CV* ≤ | | |
| Volume, mL | Valve Spring | % | µL | % | µL | Cat. No. | 2021 List Price | Cat. No. | 2021 List Price | | |
| Dispensette® S Trace Analysis, Analog-adjustable | | | | | | | | | | | |
| 1-10 | Platinum-iridium | 0.5 | 50 | 0.1 | 10 | 4640040 | \$1,168.60 | 4640041 | \$1,201.60 | | |
| 1-10 | Tantalum | 0.5 | 50 | 0.1 | 10 | 4640240 | 1,168.60 | 4640241 | 1,201.60 | | |

A*=Accuracy, CV*=Coefficient of Variation

* 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.



Dispensette® S



Dispensette® S Organic



Dispensette® S Trace Analysis

Dispensette® S Bottletop Dispensers

Dispensette® Accessories



Flexible discharge tube

| For Dispensette® S ♦ cap | Without recirculation valve | | | | With recirculation valve | |
|--------------------------|-----------------------------|------------|------------------------|-----------------|--------------------------|-----------------|
| | Shape | Length, mm | Cat. No. | 2021 List Price | Cat. No. | 2021 List Price |
| For Nominal Volume, mL | | | | | | |
| 1, 2, 5, 10 | fine tip | 105 | 708002 | \$31.00 | 708102 | \$157.40 |
| 5, 10 | standard | 105 | 708005 | 29.00 | 708104 | 155.20 |
| 25, 50, 100 | fine tip | 135 | 708006 | 36.80 | 708106 | 163.80 |
| 25, 50, 100 | standard | 135 | 708008 | 36.80 | 708109 | 158.40 |

For Dispensette® S Organic ♦ cap

| Discharge tube | Shape | Length, mm | Cat. No. | 2021 | | |
|------------------------|----------|------------|------------------------|----------|------------------------|----------|
| | | | | Cat. No. | 2021 List Price | |
| For Nominal Volume, mL | | | | | | |
| 5, 10 | fine tip | 105 | 708012 | \$36.80 | 708112 | \$171.40 |
| 5, 10 | standard | 105 | 708014 | 29.00 | 708114 | 163.80 |
| 25, 50, 100 | fine tip | 135 | 708016 | 36.80 | 708116 | 171.40 |
| 25, 50, 100 | standard | 135 | 708019 | 32.20 | 708119 | 167.00 |

Dispensette® S Trace Analysis ◆ cap

| Discharge tube | Shape | Length, mm | Cat. No. Pt - Ir | 2021 | | |
|-----------------------------|----------|------------|------------------------|----------------|------------------------|---------|
| | | | | Cat. No. Ta | 2021 List Price | |
| Without Recirculation Valve | fine tip | 105 | 708022 | \$31.20 | 708024 | \$31.20 |
| With Recirculation Valve | fine tip | 105 | 708122 | 193.80 | 708124 | 193.80 |

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

PTFE, coiled, length 800 mm (= 31.5") with safety handle

| | | |
|-------------|------------------------|----------|
| 2, 5, 10 | 708132 | \$200.40 |
| 25, 50, 100 | 708134 | 215.20 |

Not suitable for use with hydrofluoric acid. For nominal volume, mL

Flexible discharge tubes for Dispensette® S Trace Analysis—NOT FOR USE WITH HF

| | | |
|----|------------------------|--------|
| 10 | 708132 | 200.40 |
|----|------------------------|--------|

Dispensette® S Bottletop Accessories



Dispensing cartridge



Recirculation tube

Telescoping filling tubes



Filling valve



Drying tube

Dispensette® S Trace Analysis ◆ cap

2021
Cat. No. List Price

Replacement parts Dispensette® S Trace Analysis

Dosing element

Nominal volume 1-10 mL, calibrated, includes quality certificate

[708035](#) \$840.40

| For nominal volume, mL | Length, mm (inches) | 2021 Cat. No. | List Price |
|---------------------------------------|--------------------------|------------------------|------------|
| Telescoping filling tubes, FEP | | | |
| 0.5, 1, 2, 5, 10 | 70 - 140 (2.6" - 5.5") | 708210 | \$25.40 |
| 0.5, 1, 2, 5, 10 - standard | 125 - 240 (4.9" - 9.5") | 708212 | 35.40 |
| 0.5, 1, 2, 5, 10 | 195-350 (7.7"-13.8") | 708214 | 50.20 |
| 0.5, 1, 2, 5, 10 | 250 - 480 (9.8" - 18.9") | 708216 | 40.20 |
| 25, 50, 100 - standard | 170 - 330 (6.7" - 13.0") | 708218 | 51.20 |
| 25, 50, 100 | 250 - 480 (9.8" - 18.9") | 708220 | 53.40 |
| Recirculation tube | | | |
| Recirculation tube only | | 6747 | 5.80 |

| 2021 Cat. No. | List Price |
|--|------------------------------|
| Filling valve for Dispensette® S and Dispensette® S Organic, nominal volume, mL | |
| 1, 2, 5, 10, each | 6734 \$59.00 |
| 25, 50, 100, each | 6735 65.60 |
| For Dispensette® S Trace Analysis, each | 6739 117.60 |
| Discharge valve for Dispensette® S nominal volume, mL | |
| 1, 2 each | 6749 70.20 |
| 5, 10 each | 6727 74.40 |
| 25, 50, 100, each | 6728 88.00 |
| Discharge valve for Dispensette® S Organic, nominal volume, mL | |
| 1, 2, 5, 10 each | 6729 74.40 |
| 25, 50, 100, each | 6730 88.00 |
| Discharge valve for Dispensette® S Trace Analysis, nominal volume, Pt-Ir, Ta | |
| Platinum-Iridium | 6732 123.20 |
| Tantalum | 6733 123.20 |
| Drying tube | |
| Without drying agent, each | 707930 56.80 |
| Micro filter connector assembly with Luer-slip connection | |
| To fit 0.2µm filter for sterile dispensing. Autoclavable (photo page 40). | 704495 24.20 |

Dispensette® S Bottletop Accessories



Amber bottle



Bottle stand



Remote Dispensing System for Dispensette® S

| | 2021 Cat. No. | List Price |
|--|------------------------|------------|
| Amber bottle - ethylene-acrylate coated | | |
| Threaded Bottle, PP screw cap, LDPE pouring ring, 250 mL, 33 mm | 704004 | \$28.20 |
| Threaded Bottle, PP screw cap, LDPE pouring ring, 500 mL, 33 mm | 704006 | 38.20 |
| Threaded Bottle, PP screw cap, LDPE pouring ring, 1000 mL, 45 mm | 704008 | 49.40 |
| Bottle Stand, PP, 220 mm x 160 mm x 325 mm | 704275 | 320.00 |

| Size | PP Cat. No. | 2021 List Price | ETFE Cat. No. | 2021 List Price |
|-------------------------------|------------------------|--------------------|------------------------|--------------------|
| Bottle thread adapters | | | | |
| 33/24 mm | 704325 | \$10.20 | 704375 | \$26.40 |
| 33/28 mm/S28 mm | 704328 | 10.20 | 704378 | 31.20 |
| 45/33 mm | 704396 | 10.20 | 704398 | 35.20 |
| 45/35 mm | 704431 | 19.80 | — | — |
| 45/38 mm | 704397 | 10.20 | 704399 | 35.20 |
| 45/S40 mm (PP/PTFE) | 704343 | 10.20 | 704391 | 55.20 |
| Fits 33/STJ19/26 | 704419 | 33.80 | — | — |
| Fits 33/STJ24/29 | 704424 | 33.80 | — | — |
| Fits 33/STJ29/32 | 704429 | 39.60 | — | — |

| | 2021 Cat. No. | List Price |
|--|------------------------|------------|
| Remote Dispensing (for Dispensette® S, Dispensette® S Organic) | | |
| Remote Dispensing System (dispenser not included) | 704261 | \$579.00 |
| Dispensing System for NOWPak® containers only (includes wall mount, dispenser not included) | 704284 | 365.00 |
| Accessories | | |
| Filling tube, FEP, 10 m, outer diameter 7.6 mm | 704267 | 325.60 |
| Thread adapter, Steel, outer thread 2", inner thread 3/4" | 704270 | 147.60 |
| Thread adapter, PTFE, inner thread 3/4" (33 mm), to connect remote dispensing system with drums with GL outer thread | 704282 | 93.20 |
| Support rod connector, for wall mounting unit | 704268 | 87.80 |
| Table/shelf clamp, for wall mounting unit | 704272 | 41.20 |
| Thread adapter, PTFE, 3/4", 33mm for direct mounting of Dispensette® S on drum | 704281 | 79.20 |

seripettor®

The seripettor® bottletop dispenser is an economical wiping seal dispenser suitable for many commonly used reagents in biological 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, and agar culture media at up to a max. temperature of 60 °C. See selection guide on page 51.
- **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 easy replacement of wearing parts, extending instrument life.
- **Fits most reagent containers**—The 45 mm standard thread, plus the included adapters with 33 mm, 38 mm and 40 mm 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 which attack 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 500 mbar
- Density up to 2.2 g/cm³
- Temperature of use between 15 °C and 40 °C of instrument and reagent (agar culture media up to 60 °C)
- Viscosity
2 mL instrument: 300 mm²/s
10 mL instrument: 150 mm²/s
25 mL instrument: 75 mm²/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
- 0.2 µm membrane filter



Sterile dispensing cartridge installation



[1] Dispensing cartridge, non-sterile



[2] Dispensing cartridge, sterile



[3] Flexible discharge tube



[4] Valve block cap



[5] 0.2 µm membrane filter



[6] Discharge tube

Items supplied

Each seripettor® bottletop dispenser includes:

- Spare dispensing cartridge
- Three PP adapters: 45/S40 mm, 45/38 mm, and 45/33 mm. See page 49 for other adapters
- Discharge tube
- 250 mm filling tube
- Operating manual
- One-year warranty

| Volume, mL | Subdivision, mL | A* < ± % | CV* ≤ % | Cat. No. | 2021 List Price |
|--------------------|-----------------|----------|---------|-------------------------|-----------------|
| seripettor® | | | | | |
| 0.2-2 | 0.04 | 1.2 | 0.2 | 4720120 | \$140.40 |
| 1-10 | 0.2 | 1.2 | 0.2 | 4720140 | 140.40 |
| 2.5-25 | 0.5 | 1.2 | 0.2 | 4720150 | 178.00 |

A*=Accuracy, CV*=Coefficient of Variation

* 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.

| Description | Photo | Pack of | Cat. No. | 2021 List Price |
|--|-------|---------|------------------------|-----------------|
| Replacement parts | | | | |
| Dispensing cartridge, for 2 mL seripettor®, non-sterile | 1 | 3 | 704500 | \$65.20 |
| Dispensing cartridge, for 10 mL seripettor®, non-sterile | 1 | 3 | 704502 | 65.20 |
| Dispensing cartridge, for 25 mL seripettor®, non-sterile | 1 | 3 | 704504 | 92.20 |
| Dispensing cartridge, for 2 mL seripettor®, sterile | 2 | 7 | 704507 | 114.60 |
| Dispensing cartridge, for 10 mL seripettor®, sterile | 2 | 7 | 704506 | 114.60 |
| Dispensing cartridge, for 25 mL seripettor®, sterile | 2 | 5 | 704508 | 122.00 |
| Flexible discharge tubing for 25 mL seripettor®, PTFE, 800 mm | 3 | 1 | 704523 | 226.80 |
| Flexible discharge tubing for 2 mL & 10 mL seripettor®, PTFE, 800 mm | 3 | 1 | 704522 | 135.00 |
| Discharge tube for 2 mL seripettor® | 6 | 1 | 704518 | 41.20 |
| Discharge tube for 10 mL and 25 mL seripettor® | 6 | 1 | 704520 | 41.20 |
| Valve block cap for 2 mL & 10 mL seripettor®, PP | 4 | 1 | 704552 | 36.80 |
| Valve block cap for 25 mL seripettor®, PP | 4 | 1 | 704554 | 36.80 |
| Filling tube, 250 mm | – | 2 | 704532 | 11.60 |
| Filling tube, 500 mm | – | 2 | 704534 | 16.60 |
| Filling tube for sterile applications, 250 mm | – | 1 | 704536 | 11.60 |
| Filling tube for sterile applications, 500 mm | – | 1 | 704538 | 16.60 |
| Membrane filter, 0.2 µm, non-sterile | 5 | 10 | 26535 | 122.00 |

Bottles & adapters

See detailed listing on page 47

seripettor® pro

The seripettor® pro is a bottletop dispenser designed to handle a wider range of liquids than the seripettor® for customers who do not require all of the features of the Dispensette®. Like the 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 Hastelloy® 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**—Filling tube adjusts to fit many bottles without cutting.
- **Discharge tube with a threaded safety screw cap**—Attach and remove the discharge tube with a quick twist.
- **Spring-loaded piston**—One-handed, semi-automatic operation is possible.
- **Threaded safety cap**—Cap is attached and removed with a quick twist.

An economical, versatile wiping-seal dispenser



| Volume, mL | Subdivision, mL | A* < ± % | CV* ≤ % | Cat. No. | 2021 List Price |
|------------------------|-----------------|----------|---------|-------------------------|-----------------|
| seripettor® pro | | | | | |
| 0.2-2 | 0.04 | 1.2 | 0.2 | 4720420 | \$353.60 |
| 1-10 | 0.2 | 1.2 | 0.2 | 4720440 | 353.60 |
| 2.5-25 | 0.5 | 1.2 | 0.2 | 4720450 | 505.00 |

A*=Accuracy, CV*=Coefficient of Variation

* 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.



[1] Dispensing cartridge, non-sterile



[2] Flexible discharge tube



[3] Telescoping filling tubes, FEP

| Description | Photo | Pack of | Cat. No. | 2021 List Price |
|--|-------|---------|------------------------|-----------------|
| Dispensing cartridges | | | | |
| Dispensing cartridge, for 2 mL seripettor® pro, non-sterile | 1 | 3 | 704500 | \$65.20 |
| Dispensing cartridge, for 10 mL seripettor® pro, non-sterile | 1 | 3 | 704502 | 65.20 |
| Dispensing cartridge, for 25 mL seripettor® pro, non-sterile | 1 | 3 | 704504 | 92.20 |
| Flexible discharge tube for 2 mL & 10 mL seripettor® pro | 2 | 1 | 704522 | 135.00 |
| Flexible discharge tube for 25 mL seripettor® pro | 2 | 1 | 704523 | 226.80 |
| Discharge tube for 2 mL seripettor® pro | 1 | | 707915 | 84.60 |
| Discharge tube for 10 mL seripettor® pro | 1 | | 707916 | 79.20 |
| Discharge tube for 25 mL seripettor® pro | 1 | | 707918 | 79.20 |

Bottle thread adapters see detailed thread adapter listing on page 47

| For Nominal Volume, mL | Length, mm | Photo | Pack of | Cat. No. | 2021 List Price |
|----------------------------------|--------------------------|-------|---------|------------------------|-----------------|
| Telescoping filling tubes | | | | | |
| 2, 10 | 70 - 140 (2.6" - 5.5") | 3 | 1 | 708210 | \$25.40 |
| 2, 10 | 125 - 240 (4.9" - 9.5") | 3 | 1 | 708212 | 35.40 |
| 2, 10 | 195 - 350 (7.7" - 13.8") | 3 | 1 | 708214 | 50.20 |
| 2, 10 | 250 - 480 (9.8" - 18.9") | 3 | 1 | 708216 | 40.20 |
| 25 | 170 - 330 (6.7" - 13.0") | 3 | 1 | 708218 | 51.20 |
| 25 | 250 - 480 (9.8" - 18.9") | 3 | 1 | 708220 | 53.40 |

Items supplied

Each seripettor® pro bottletop dispenser includes:

- Spare dispensing cartridge
- Discharge tube
- Three PP adapters: 45/S40 mm, 45/38 mm and 45/33 mm.
- Telescoping filling tube
- Operating manual
- One-year warranty

seripettor® pro Bottletop Dispenser

Operating limits and exclusions

Never use this instrument with:

- Liquids which attack PP, PE, Al₂O₃ - ceramic, ETFE, FEP, PFA and PTFE (e.g., dissolved sodium azide*)
- Liquids which attack borosilicate glass (e.g., hydrofluoric acid)
- Liquids which are decomposed catalytically by platinum-iridium (e.g., H₂O₂)
- 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 500 mbar
- Density up to 2.2 g/cm³
- Temperature 15 °C to 40 °C
- Viscosity
2 mL instrument: 300 mm²/s
10 mL instrument: 150 mm²/s
25 mL instrument: 75 mm²/s
(dynamic viscosity [mPas] = kinematic viscosity [mm²/s] x density [g/cm³])

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

Areas of application / Chemical selection list

■ seripettor® dispenser

Reagent

seripettor®

seripettor pro®

Reagent

seripettor®

seripettor pro®

| 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% | | + |
| Benzaldehyde | | + | Piperidine | | + |
| Benzyl alcohol | | + | Potassium chloride | + | + |
| Benzylamine | | + | Potassium dichromate | + | + |
| Benzylchloride | | + | Potassium hydroxide | + | + |
| Boric acid, 10% | + | + | Potassium hydroxide in ethanol | + | + |
| Butanediol | + | + | Potassium permanganate | + | + |
| 1-Butanol | | + | Propionic acid | + | + |
| Butylamine | | + | Propylene glycol (Propanediol) | + | + |
| n-Butyl acetate | | + | Pyridine | | + |
| Calcium carbonate | + | + | Pyruvic acid | + | + |
| Calcium chloride | + | + | Salicylaldehyde | | + |
| Calcium hydroxide | + | + | Salicylic acid | + | + |
| Calcium hypochlorite | | + | Silver acetate | + | + |
| Chloroacetaldehyde, 45% | | + | Silver nitrate | + | + |
| Chloroacetic acid | | + | Sodium acetate | + | + |
| Chromic acid, 50% | | + | Sodium chloride | + | + |
| Copper sulfate | + | + | Sodium dichromate | + | + |
| Cumene (Isopropyl benzene) | | + | Sodium fluoride | + | + |
| Diethylene glycol | + | + | Sodium hydroxide, 30% | + | + |
| Dimethyl sulfoxide (DMSO) | | + | Sodium hypochlorite (active) | | + |
| Dimethylaniline | | + | Chlorine approx. 10% | | + |
| Ethanol | + | + | Sulfuric acid, 10% | + | + |
| Formaldehyde, 40% | + | + | Tartaric acid | | + |
| Formamide | + | + | Urea | + | + |
| Formic acid, 100% | | + | Zinc chloride, 10% | + | + |
| Glycerol | + | + | Zinc sulfate, 10% | + | + |

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: 1017/8

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

NOTE: The seripettor® & seripettor® pro bottletop dispensers cannot be used with hydrofluoric acid (HF). See page 41 for a description of the Dispensette® S Trace Analysis Pt-Ir dispenser which is the only BRAND® dispenser designed for use with HF.



VITLAB® piccolo™



The piccolo™ is a compact wiping seal dispenser for dispensing small measured quantities of liquids in all areas of biochemical and medical research.

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 one-handed operation.

The piccolo™ comes in two versions—The piccolo™ 1 is a fixed volume instrument, while the 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, 150 mm filling tube, and operating manual.

| Instrument type | Volume setting(s), µL | A* ≤±% | CV* ≤% | Cat. No. | 2021 List Price |
|-------------------------------------|-----------------------|--------|--------|--------------------------|-----------------|
| Piccolo™ bottletop dispenser | | | | | |
| piccolo™ 1 | 100 | 3.0 | 0.4 | V1610501 | \$386.40 |
| piccolo™ 1 | 200 | 2.5 | 0.4 | V1610502 | 386.40 |
| piccolo™ 1 | 250 | 2.0 | 0.4 | V1610503 | 386.40 |
| piccolo™ 1 | 500 | 1.5 | 0.3 | V1610504 | 386.40 |
| piccolo™ 1 | 1000 | 1.0 | 0.2 | V1610506 | 386.40 |
| piccolo™ 2 | 100 / 250 | 2.0 | 0.4 | V1611503 | 435.00 |
| piccolo™ 2 | 500 / 1000 | 1.0 | 0.2 | V1611506 | 435.00 |
| piccolo™ 2 | 1000 / 2000 | 1.0 | 0.2 | V1611508 | 435.00 |

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 32/33 mm threaded bottles. Inquire about other thread adapters for the piccolo™.

| Description | Dispenser thread | Bottle thread | Cat. No. | 2021 List Price |
|-------------------------|------------------|---------------|--------------------------|-----------------|
| Adapter | | | | |
| piccolo™ thread adapter | GL28 | GL32 | V1670145 | \$20.40 |

VITLAB®