

Dispensette[®] \mathcal{S}

Safe and efficient dispensing directly from the bottle

BRAND. For lab. For life.®

+ Minimum operating forces, maximum comfort.

BRAND

Dispensette[®] S

- + Trusted in challenging continuous operation and with aggressive media.
- + Wide range of applications for organic solvents, acids, alkalis and saline solutions



Get to know the Dispensette[®]S

Whether you are dispensing solvents, acids, alkalis or saline solutions – the Dispensette[®] S bottle-top dispenser makes it easy, safe and efficient.

With both the Dispensette[®] *S* and Dispensette[®] *S* Organic, you will always have the right dispenser at hand for a wide range of media. For efficient volume adjustment, you can choose between digital and analog adjustment, or fixed volume. Do you dispense long series, sterile applications or moisture-sensitive media? With numerous accessory options, the Dispensette[®] *S* also offers efficient solutions for special applications. With the Dispensette[®] *S*, you can dispense with ease in every application. Thanks to the unique operation principle and "Made in Germany" quality, the operating forces are low.

Only the highest quality materials are used for parts that come into contact with media. Pistons made of borosilicate glass and valve springs made of platinum-iridium or tantalum are tested and proven for use with aggressive media and demanding continuous-use applications.

Intelligent solutions ensure safety in the laboratory; for example, the discharge valve with safety ball, which closes when dispensing tubes are disconnected, or the hinged screw cap which stays out of the way when dispensing. Thanks to the Easy Calibration technology, adjustment can be completed in seconds as part of test equipment monitoring in accordance with ISO 9001 and GLP guidelines.

On the following pages, find out how the Dispensette[®] *S* makes dispensing easy, safe and efficient, and which Dispensette[®] *S* is right for your application.





Dispensette® *S* Organic Digital, Analog-adjustable, or Fixed-volume Volume size ranges from 0.5 ml to 100 ml

- + Autoclavable at 121 °C
- + DE-M marking
- + Easy to dismantle for cleaning
- + Designed without seals

A Closer Look: The benefits of Dispensette[®]S

The bottle-top dispenser Dispensette[®] S has all the features that make dispensing easy, safe and efficient. Innovative ideas – trusted technology.





Positive volume setting using interior scalloped track



Valve system designed without seals



Simple-to-mount discharge tube



Accessories for serial dispensing







Fast calibration

Dispensing sterile fluids



Dispensing sensitive reagents



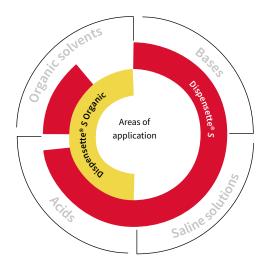
Remote Dispensing System for Drum Dispensing

The right choice for a wide variety of applications





| | Dispensette® <i>S</i> | Dispensette® <i>S</i> Organic |
|------------------------------------|---|--|
| Range of applications | aggressive reagents: such as concentrated bases and acids like H ₃ PO ₄ , H ₂ SO ₄ (with certain exceptions such as HCl, HNO ₃ , HF, etc.), saline solutions, and a variety of organic solvents. | organic solvents: such as chlorinated and fluorinated hydrocarbons like trichlorotrifluoroethane and dichloromethane, or acids like concentrated HCl and HNO ₃ (except for HF), as well as for trifluoroacetic acid (TFA), tetrahy- drofuran (THF), and peroxides. |
| Materials in contact with media | Borosilicate glass, Al ₂ O ₃ -ceramic, platinum- iridium, ETFE, FEP, PFA, PTFE and PP | Borosilicate glass, Al_2O_3 -ceramic, tantalum, ETFE, FEP, PFA, PTFE and PP |
| Vapor pressure | max. 600 mbar | max. 600 mbar |
| Viscosity | 500 mm²/s | 500 mm²/s |
| Temperature | max. 40 °C | max. 40 °C |
| Density | 2.2 g/cm ³ | 2.2 g/cm ³ |





For dispensing HF, we recommend the use of the Dispensette[®] S Trace Analysis bottle-top dispenser with platinumiridium valve spring. Please find further product information on www.brand.de

Dispenser Selection Chart

pensette **S** anic

Reagent

| | | ~ 0 |
|---|---|-----|
| Acetaldehyde | + | + |
| Acetic acid (glacial), 100% | + | + |
| Acetic acid, ≤ 96% | + | + |
| Acetic anhydride | | + |
| Acetone | + | + |
| Acetonitrile | + | + |
| Acetophenone | | + |
| Acetyl chloride | | + |
| Acetylacetone | + | + |
| Acrylic acid | + | + |
| Acrylonitrile | + | + |
| Adipic acid | + | |
| | + | + |
| Allyl alcohol | | - T |
| Aluminium chloride | + | |
| Amino acids | + | |
| Ammonia, ≤ 20% | + | + |
| Ammonia, 20-30% | | + |
| Ammonium chloride | + | |
| Ammonium fluoride | + | |
| Ammonium sulfate | + | |
| n-Amyl acetate | + | + |
| Amyl alcohol (Pentanol) | + | + |
| Amyl chloride (Chloropentane) | | + |
| Aniline | + | + |
| Barium chloride | + | |
| Benzaldehyde | + | + |
| | + | + |
| Benzene (Benzol) | + | - T |
| Benzine (Petroleum benzin), bp 70-180 °C | | + |
| Benzoyl chloride | + | + |
| Benzyl alcohol | + | + |
| Benzylamine | + | + |
| • | + | + |
| Benzylchloride | + | + |
| Boric acid, ≤ 10% | | |
| Bromobenzene | + | + |
| Bromonaphthalene | + | + |
| Butanediol | + | + |
| 1-Butanol | + | + |
| n-Butyl acetate | + | + |
| Butyl methyl ether | + | + |
| Butylamine | + | + |
| Butyric acid | + | + |
| Calcium carbonate | + | |
| Calcium chloride | + | |
| Calcium hydroxide | + | |
| Calcium hypochlorite | + | |
| Carbon tetrachloride | | + |
| Chloro naphthalene | + | + |
| Chloroacetaldehyde, ≤ 45% | + | + |
| Chloroacetic acid | + | + |
| Chloroacetone | + | + |
| Chlorobenzene | + | + |
| Chlorobutane | | |
| | + | + |
| Chloroform | | + |
| Chlorosulfonic acid | | + |
| Chromic acid, ≤ 50% | + | + |
| Chromosulfuric acid | + | |
| Copper sulfate | + | |
| Cresol | | + |
| Cumene (Isopropyl benzene) | + | + |
| | | |

| | | Sette S |
|--|--------|-------------------------------|
| Reagent | Disper | Dispen Dr ^{ga} ni |
| Cyclohexane | | + |
| Cyclohexanone | + | + |
| Cyclopentane | | + |
| Decane | + | + |
| 1-Decanol | + | + |
| Dibenzyl ether | + | + |
| Dichloroacetic acid | | + |
| Dichlorobenzene | + | + |
| Dichloroethane | | + |
| Dichloroethylene | | + |
| Dichloromethane | | + |
| Diesel oil (Heating oil), bp 250-350 °C | | + |
| Diethanolamine | + | + |
| Diethyl ether | | + |
| Diethylamine | + | + |
| 1.2 Diethylbenzene | + | + |
| Diethylene glycol | + | + |
| Dimethyl sulfoxide (DMSO) | + | + |
| Dimethylaniline | + | |
| Dimethylformamide (DMF) | + | + |
| 1.4 Dioxane | | + |
| Diphenyl ether Essential oil | + | + + |
| Ethanol | | |
| Ethanolamine | + | + + |
| Ethyl acetate | + | + |
| Ethylbenzene | | + |
| Ethylene chloride | | + |
| Fluoroacetic acid | | + |
| Formaldehyde, ≤ 40% | + | |
| Formamide | + | + |
| Formic acid, ≤ 100% | | + |
| Glycerol | + | + |
| Glycol (Ethylene glycol) | + | + |
| Glycolic acid, ≤ 50% | + | |
| Heating oil (Diesel oil), bp 250-350 °C | | + |
| Heptane | | + |
| Hexane | | + |
| Hexanoic acid | + | + |
| Hexanol | + | + |
| Hydriodic acid, ≤ 57% ** | + | + |
| Hydrobromic acid | | + |
| Hydrochloric acid, ≤ 20% | + | + |
| Hydrochloric acid, 20-37% ** | | + |
| Hydrogen peroxide, ≤ 35% | | + |
| Isoamyl alcohol | + | + |
| Isobutanol | + | + |
| Isooctane | | + |
| Isopropanol (2-Propanol) | + | + |
| Isopropyl ether | + | + |
| Lactic acid | + | |
| Methanol | + | + |
| Methoxybenzene | + | + |
| Methyl benzoate | + | + |
| Methyl butyl ether | + | + |
| Methyl ethyl ketone Methyl formate | + | + + |
| Methyl propyl ketone | + + | + + |
| incury propyr ketone | Ŧ | |

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 BRAND. Status as of: 0520-13 $\,$

| . . | Dispense | enser |
|---|----------|--------------|
| Reagent | Disp | Disp Ores |
| Methylene chloride | | + |
| Mineral oil (Engine oil) | + | + |
| Monochloroacetic acid | + | + |
| Nitric acid, ≤ 30% | + | + |
| Nitric acid, 30-70% */ ** | | + |
| Nitrobenzene | + | + |
| Oleic acid | + | + |
| Oxalic acid | + | |
| n-Pentane | | + |
| Peracetic acid | | + |
| Perchloric acid | + | + |
| Perchloroethylene | | + |
| Petroleum, bp 180-220 °C | | + |
| Petroleum ether, bp 40-70 °C | | + |
| Phenol | + + | + + |
| Phenylethanol Phenylhydrazine | + | + + |
| Phenylhydrazine Phosphoric acid,≤85% | + | + |
| Phosphoric acid, 85% + | | |
| Sulfuric acid, 98%, 1:1 | + | + |
| Piperidine | + | + |
| Potassium chloride | + | |
| Potassium dichromate | + | |
| Potassium hydroxide | + | |
| Potassium permanganate | + | |
| Propionic acid | + | + |
| Propylene glycol (Propanediol) | + | + |
| Pyridine | + | + |
| Pyruvic acid | + | + |
| Salicylaldehyde | + | + |
| Scintilation fluid | + | + |
| Silver acetate | + | |
| Silver nitrate | + | |
| Sodium acetate | + | |
| Sodium chloride | + | |
| Sodium dichromate | + | |
| Sodium fluoride | + | |
| Sodium hydroxide, ≤ 30% | + | |
| Sodium hypochlorite | + | |
| Sulfuric acid, ≤ 98% | + | + |
| Tartaric acid | + | |
| Tetrachloroethylene | | + |
| Tetrahydrofuran (THF) */ ** | | + |
| Tetramethylammonium hydroxide | + | 4 |
| Toluene Trichloroacetic acid | | + + |
| Trichlorobenzene | | + + |
| Trichloroethane | | + |
| Trichloroethylene | | + |
| Trichlorotrifluoro ethane | | + |
| Triethanolamine | + | + |
| Triethylene glycol | + | + |
| Trifluoro ethane | | + |
| Trifluoroacetic acid (TFA) | | + |
| Turpentine | | + |
| Urea | + | |
| Xylene | | + |
| Zinc chloride, ≤ 10% | + | |
| Zinc sulfate, ≤ 10% | + | |

* use ETFE/PTFE bottle adapter

** use PTFE seal for valve block

The right Dispensette[®] for your applications

Items supplied:

Dispensette[®] *S* / Dispensette[®] *S* Organic bottle-top dispenser, for threaded bottles GL 45, DE-M marking, performance certificate, telescoping filling tube, recirculation tube (optional), mounting tool and adapters of polypropylene:

| Nominal volume ml | Adapter for bottle thread | Filling tube length |
|----------------------|---|------------------------|
| 1, 2, 5, 10 | GL 24-25, GL 28-S 28, GL 32-33, GL 38, S 40 | 125-240 mm |
| 25, 50, 100 | GL 32-33, GL 38, S 40 | 170-330 mm |



Dispensette® **S**, Digital

| Сара | ncity ml | Subdivision ml | A* ≤ % | ±μl | CV* ≤ % | μl | without recirculation valve Cat. No. | with recirculation valve Cat. No. |
|-------|-------------|-------------------|-----------|-----|------------|----|--|---|
| 0.1 - | 1 | 0.005 | 0.5 | 5 | 0.1 | 1 | 4600310 | 4600311 |
| 0.2 - | 2 | 0.01 | 0.5 | 10 | 0.1 | 2 | 4600320 | 4600321 |
| 0.5 - | 5 | 0.02 | 0.5 | 25 | 0.1 | 5 | 4600330 | 4600331 |
| 1 - | 10 | 0.05 | 0.5 | 50 | 0.1 | 10 | 4600340 | 4600341 |
| 2.5 - | 25 | 0.1 | 0.5 | 125 | 0.1 | 25 | 4600350 | 4600351 |
| 5 - | 50 | 0.2 | 0.5 | 250 | 0.1 | 50 | 4600360 | 4600361 |

Dispensette[®] **S**, Analog-adjustable

| Capacity ml | Subdivision ml | A* ≤ % | ± μl | CV* % | ≤ µl | without recirculation valve Cat. No. | with recirculation valve Cat. No. |
|----------------|-------------------|-----------|---------|----------|---------|--|---|
| 0.1 - 1 | 0.02 | 0.5 | 5 | 0.1 | 1 | 4600100 | 4600101 |
| 0.2 - 2 | 0.05 | 0.5 | 10 | 0.1 | 2 | 4600120 | 4600121 |
| 0.5 - 5 | 0.1 | 0.5 | 25 | 0.1 | 5 | 4600130 | 4600131 |
| 1 - 10 | 0.2 | 0.5 | 50 | 0.1 | 10 | 4600140 | 4600141 |
| 2.5 - 25 | 0.5 | 0.5 | 125 | 0.1 | 25 | 4600150 | 4600151 |
| 5 - 50 | 1.0 | 0.5 | 250 | 0.1 | 50 | 4600160 | 4600161 |
| 10 - 100 | 1.0 | 0.5 | 500 | 0.1 | 100 | 4600170 | 4600171 |

Dispensette[®] **S**, Fixed-volume

| Capacity | Α | * ≤ ± | | CV* ≤ | ≤ | without | with |
|----------------------------------|----------------------|---------|---------|-------|----|---------------------------------|---------------------------------|
| ml | 9 | 6 | μΙ | % | μΙ | recirculation valve Cat. No. | recirculation valve Cat. No. |
| 1 | 0 | .5 | 5 | 0.1 | 1 | 4600210 | 4600211 |
| 2 | C | .5 | 10 | 0.1 | 2 | 4600220 | 4600221 |
| 5 | 0 | .5 | 25 | 0.1 | 5 | 4600230 | 4600231 |
| 10 | 0 | .5 | 50 | 0.1 | 10 | 4600240 | 4600241 |
| Special fixed volum ordering) | nes: 0.5-100 ml (ple | 4600290 | 4600291 | | | | |







Dispensette[®] **S** Organic, Digital

| Ca | pa | city ml | Subdivision ml | A* ≤ % | ± μl | CV* ≤ % | ≤ µl | without recirculation valve Cat. No. | with recirculation valve Cat. No. |
|-----|----|------------|-------------------|-----------|---------|------------|---------|--|---|
| 0.5 | - | 5 | 0.02 | 0.5 | 25 | 0.1 | 5 | 4630330 | 4630331 |
| 1 | - | 10 | 0.05 | 0.5 | 50 | 0.1 | 10 | 4630340 | 4630341 |
| 2.5 | - | 25 | 0.1 | 0.5 | 125 | 0.1 | 25 | 4630350 | 4630351 |
| 5 | - | 50 | 0.2 | 0.5 | 250 | 0.1 | 50 | 4630360 | 4630361 |

Dispensette[®] **S** Organic, Analog-adjustable

| Capacity ml | Subdivision ml | A* ≤ ± % | μl | CV* ≤ % | μι | without recirculation valve Cat. No. | with recirculation valve Cat. No. |
|----------------|-------------------|-------------|-----|------------|-----|--|---|
| 0.5 - 5 | 0.1 | 0.5 | 25 | 0.1 | 5 | 4630130 | 4630131 |
| 1 - 10 | 0.2 | 0.5 | 50 | 0.1 | 10 | 4630140 | 4630141 |
| 2.5 - 25 | 0.5 | 0.5 | 125 | 0.1 | 25 | 4630150 | 4630151 |
| 5 - 50 | 1.0 | 0.5 | 250 | 0.1 | 50 | 4630160 | 4630161 |
| 10 - 100 | 1.0 | 0.5 | 500 | 0.1 | 100 | 4630170 | 4630171 |

Dispensette[®] **S** Organic, Fixed-volume

| Capacity ml | | A* ≤ ± % | μl | CV* ≤ % | ≤ µl | without recirculation valve Cat. No. | with recirculation valve Cat. No. |
|---------------------|---------------------|-------------|---------|------------|---------|--|---|
| 5 | | 0.5 | 25 | 0.1 | 5 | 4630230 | 4630231 |
| 10 | | 0.5 | 50 | 0.1 | 10 | 4630240 | 4630241 |
| Special fixed volum | nes: 2-100 ml (plea | ase sta | 4630290 | 4630291 | | | |

* Calibrated to deliver (TD, Ex). Error limits according to the nominal capacity (= maximum volume) indicated on the instrument, obtained with instrument and distilled water at equilibrium with ambient temperature at 20 °C, and with smooth, steady operation. The error limits are well within the limits of DIN EN ISO 8655-5. DE-M marking. A = Accuracy, CV = Coefficient of variation



All product information can be found at **shop.brand.de**

Note:

For trace analysis and dispensing HF, we recommend the use of the Dispensette® *S* Trace Analysis bottle-top dispenser.





Accessories



Bottle stand PP. Full plastic construction. Support rod 325 mm, base plate 220 x 160 mm, weight 1130 g.





Drying tube incl. PTFE-sealing ring Without drying agent.

| Pack of | Cat. No. |
|---------|----------|
| 1 | 707930 |



PTFE. For highly volatile media.

Pack of Cat. No.



Remote Dispensing System for Drum Dispensing Dispensing system for Dispensette[®], standard equipment*

Pack of Cat. No.

1 704261

* (Dispensette® not included)

Discharge tubes

With and without recirculation valve. Screw cap PP. Pack of 1.

| Description | Nominal volume ml | Shape | Length mm | without recirculation valve Cat. No. | with recirculation valve Cat. No. |
|------------------------------------|-------------------------|----------|--------------|--|---|
| Dispensette [®] S | 1, 2, 5, 10 | fine tip | 108 | 708002 | 708102 |
| | 5, 10 | standard | 108 | 708005 | 708104 |
| | 25, 50, 100 | fine tip | 135 | 708006 | 708106 |
| | 25, 50, 100 | standard | 135 | 708008 | 708109 |
| Dispensette [®] S Organic | 1, 2, 5, 10 | fine tip | 108 | 708012 | 708112 |
| | 5, 10 | standard | 108 | 708014 | 708114 |
| | 25, 50, 100 | fine tip | 135 | 708016 | 708116 |
| | 25, 50, 100 | standard | 135 | 708019 | 708119 |



Flexible discharge tube with recirculation valve **

For Dispensette[®] S and Dispensette[®] S Organic. PTFE, coiled, length approx. 800 mm, with safety handle. Pack of 1.

| Nominal volume ml | Discharge tube Outer Ø mm | Inner Ø mm | Cat. No. |
|----------------------|------------------------------|------------|----------|
| 1, 2, 5, 10 | 3 | 2 | 708132 |
| 25, 50, 100 | 4.5 | 3 | 708134 |



Additional accessories can be found at **shop.brand.de**

** not suitable for HF

USER

Easy Calibration technology: adjustment without tools

Monitoring of measuring instruments in accordance with ISO 9001 and GLP guidelines requires regular verification (roughly every 3-12 months) and possibly adjustment of the measuring instruments. If adjustment is necessary, it can be done quickly and easily using Easy Calibration technology.

Easy Calibration Dispensette® S Digital



1.

Open housing by sliding the latch to the left and removing the front (Fig. 1).

2.



adjustment cover will then come off (Fig. 2). Discard the adjustment cover.

Pull out the safety lock. The

3.

Pull the red knob to disengage the gears. Set the display to actual delivered volume (e.g., 9.90 ml) (Fig. 3).

4

First press in the red knob and then the safety lock again (Fig. 4).

5.

Replace housing and slide the latch to the right (Fig. 5). A volume check is recommended after every adjustment.

Easy Calibration Dispensette® S Analog-adjustable





1.

Insert the pin of the mounting tool into the cover plate, and break it off with a rotating motion (Fig. 2). Discard the adjustment cover.

2.

Insert the pin of the mounting tool into the adjustment screw (Fig. 3) and rotate to the left in order to increase the dispensing volume, or rotate to the right to decrease the dispensing volume (e.g. for an actual value of 9.97 ml, rotate approx. 1/2 turn to the left).



Checking the volume

a) Preparation of the instrument

Clean the instrument, fill it with distilled H₂O and then prime it carefully.

b) Check the volume

- 10 dispensing operations with distilled H₂O in 3 volume ranges (100 %, 50 %, 10%) are recommended.
- For filling, pull up the piston gently to the upper stop of the volume set.
- For discharge, depress piston slowly and steadily without force to the lower stop.
- Wipe off the tip of discharge tube.
- Weigh the dispensed quantity on an analytical balance. (Please follow the operating manual of the balance manufacturer.)
- Calculate the dispensed volume. The Z factor takes account of the temperature and air buoyancy.

The complete testing procedure (SOP) can be downloaded at www.brand.de.



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