

# Dispensette® S

Safe and efficient dispensing directly from the bottle

BRAND. For lab. For life.®

- + Minimum operating forces, maximum comfort.
- + 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

Digital, Analog-adjustable,  
or Fixed-volume

Volume size ranges  
from 0.1 ml to 100 ml



## 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.



Dispensette® S, Fixed-volume



Dispensette® S, Analog

**Volume selection**

with interior scalloped track

**Discharge tube**

with recirculation valve

**Filling valve, olive-shaped**

for firmer attachment of the filling tube

**Recirculation tube**

for discharge tubes with recirculation valve

**Hinged screw cap**

doesn't get in the way when dispensing



Positive volume setting using interior scalloped track



Valve system designed without seals



Simple-to-mount discharge tube



Accessories for serial dispensing tube

**Easy Calibration**

Calibration adjustments according to ISO 9001 and GLP are done within seconds.



**Discharge tube**

without recirculation valve

**Large viewport**

Large sight opening enables inspection of media

**360° rotating valve block**

with GL 45 thread

**Discharge valve with safety ball**

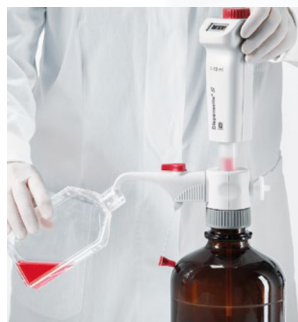
closes when discharge tube is not mounted preventing inadvertent dispensing

**Telescoping filling tube**

**USER TIP**  
on page 11



Fast calibration



Dispensing sterile fluids



Dispensing sensitive reagents

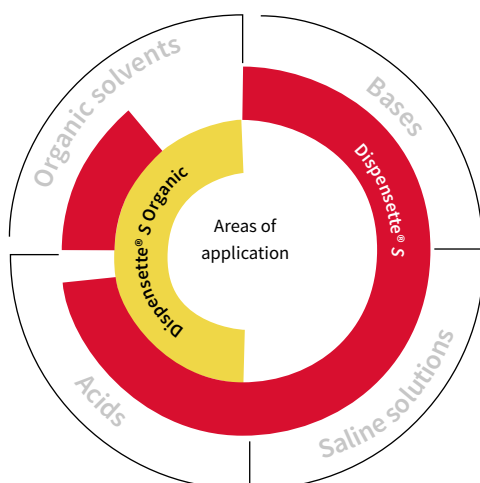


Remote Dispensing System for Drum Dispensing

# The right choice for a wide variety of applications



	Dispensette® S	Dispensette® S Organic
<b>Range of applications</b>	aggressive reagents: such as concentrated bases and acids like $H_3PO_4$ , $H_2SO_4$ (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), tetrahydrofuran (THF), and peroxides.
<b>Materials in contact with media</b>	Borosilicate glass, $Al_2O_3$ -ceramic, platinum-iridium, ETFE, FEP, PFA, PTFE and PP	Borosilicate glass, $Al_2O_3$ -ceramic, tantalum, ETFE, FEP, PFA, PTFE and PP
<b>Vapor pressure</b>	max. 600 mbar	max. 600 mbar
<b>Viscosity</b>	500 mm <sup>2</sup> /s	500 mm <sup>2</sup> /s
<b>Temperature</b>	max. 40 °C	max. 40 °C
<b>Density</b>	2.2 g/cm <sup>3</sup>	2.2 g/cm <sup>3</sup>



**i**  
For dispensing HF, we recommend the use of the Dispensette® S Trace Analysis bottle-top dispenser with platinum-iridium valve spring. Please find further product information on [www.brand.de](http://www.brand.de)

# Dispenser Selection Chart

Reagent	Dispensette® S		Reagent	Dispensette® S		Reagent	Dispensette® S	
	Organic			Organic			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	+	+	Dichloromethane		+	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	+	+
Benzene (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	+	+	Hydriodic 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%	+	+	Isocetane		+	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)	+	+						

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: 05/20/13

\* 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, 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

Capacity ml	Subdivision ml	A* ≤ ± %	CV* ≤ %	without recirculation valve Cat. No.	with recirculation valve Cat. No.
0.1 - 1	0.005	0.6 6	0.2 2	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* ≤ ± %	CV* ≤ %	without recirculation valve Cat. No.	with recirculation valve Cat. No.
0.1 - 1	0.02	0.6 6	0.2 2	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 ml	A* ≤ ± %	CV* ≤ %	without recirculation valve Cat. No.	with recirculation valve Cat. No.
1	0.6 6	0.2 2	4600210	4600211
2	0.5 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 volumes: 0.5-100 ml (please state when ordering)			4600290	4600291



### Dispensette® S Organic, Digital

Capacity ml	Subdivision ml	$A^* \leq \pm$ % $\mu$ l		$CV^* \leq$ % $\mu$ l		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	$A^* \leq \pm$ % $\mu$ l		$CV^* \leq$ % $\mu$ l		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	$A^* \leq \pm$ % $\mu$ l		$CV^* \leq$ % $\mu$ l		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 volumes: 2-100 ml (please state when ordering)					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](http://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.

Pack of	Cat. No.
1	704275



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

Pack of	Cat. No.
1	707930



**Sealing ring for valve block**  
PTFE. For highly volatile  
media.

Pack of	Cat. No.
1	704486



## 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
Dispensette® S Organic	25, 50, 100	standard	135	708008	708109
	1, 2, 5, 10	fine tip	108	708012	708112
	5, 10	standard	108	708014	708114
Dispensette® S Organic	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		Cat. No.
	Outer Ø mm	Inner Ø mm	
1, 2, 5, 10	3	2	708132
25, 50, 100	4.5	3	708134

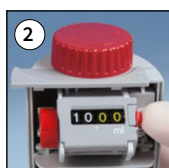


Additional accessories  
can be found at [shop.brand.de](http://shop.brand.de)

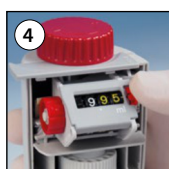
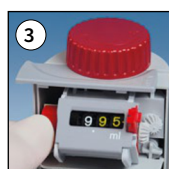
\*\* not suitable for HF

# Easy Calibration technology: adjustment without tools

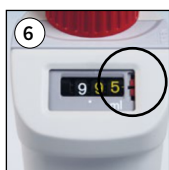
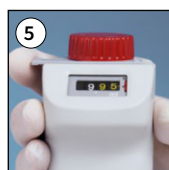
Monitoring of measuring instruments in accordance with ISO 9001 and GLP guidelines requires regular verification (roughly every 3–12 months) and possibly adjustment of the measuring instruments. If adjustment is necessary, it can be done quickly and easily using Easy Calibration technology.



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



2. \_\_\_\_\_  
Pull out the safety lock. The adjustment cover will then come off (Fig. 2). Discard the adjustment cover.



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.



## Checking the volume

### a) Preparation of the instrument

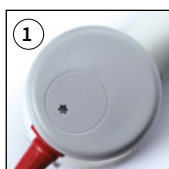
Clean the instrument, fill it with distilled H<sub>2</sub>O and then prime it carefully.

### b) Check the volume

- 10 dispensing operations with distilled H<sub>2</sub>O 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](http://www.brand.de).



## 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).

**Note:** On both models, the change to the factory setting is marked by a red recalibration flag.

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Please appreciate, therefore, that no claims can be derived from our advice. The user is responsible for checking the appropriateness of the product for any particular application.

California Residents: For more information concerning California Proposition 65, please refer to [www.brand.de/calprop65](http://www.brand.de/calprop65)

Subject to technical modification without notice. Errors excepted.



Find accessories and replacement parts, user manuals, test instructions (SOP) and product videos at [shop.brand.de](http://shop.brand.de)



Further information on products and applications can be found on our YouTube channel: [mylabBRAND](https://www.youtube.com/mylabBRAND)



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