

# Dispensette<sup>®</sup> $\mathcal{S}$

Safe and efficient dispensing directly from the bottle

### BRAND. For lab. For life.®

+ Minimum operating forces, maximum comfort.

BRAND

Dispensette<sup>®</sup> 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<sup>®</sup>S

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

With both the Dispensette<sup>®</sup> *S* and Dispensette<sup>®</sup> *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<sup>®</sup> *S* also offers efficient solutions for special applications. With the Dispensette<sup>®</sup> *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<sup>®</sup> *S* makes dispensing easy, safe and efficient, and which Dispensette<sup>®</sup> *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<sup>®</sup>S

The bottle-top dispenser Dispensette<sup>®</sup> 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



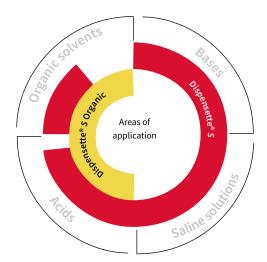
Remote Dispensing System for Drum Dispensing

# 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 <sub>3</sub> PO <sub>4</sub> , H <sub>2</sub> SO <sub>4</sub> (with certain exceptions such as HCl, HNO <sub>3</sub> , 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 <sub>3</sub> (except for HF), as well as for trifluoroacetic acid (TFA), tetrahy- drofuran (THF), and peroxides.
Materials in contact with media	Borosilicate glass, Al <sub>2</sub> O <sub>3</sub> -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 <sup>3</sup>	2.2 g/cm <sup>3</sup>





For dispensing HF, we recommend the use of the Dispensette<sup>®</sup> 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 <sup>ga</sup> 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  $\,$ 

<b>.</b> .	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<sup>®</sup> for your applications

#### Items supplied:

Dispensette<sup>®</sup> *S* / Dispensette<sup>®</sup> *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<sup>®</sup> **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<sup>®</sup> **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<sup>®</sup> **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<sup>®</sup> **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<sup>®</sup> **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<sup>®</sup>, 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 <sup>®</sup> 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 <sup>®</sup> 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<sup>®</sup> S and Dispensette<sup>®</sup> 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.

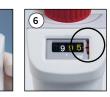
#### Easy Calibration Dispensette® S Digital



#### 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 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.



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Our technical literature is intended to inform and advise our customers. However, the validity of general empirical values, and of results obtained under test conditions, for specific applications depends on many factors beyond our control.

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

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** 



Further information on products and applications can be found on our YouTube channel: mylabBRAND



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