VITLAB® Dispenser line: genius², simplex², and TA²

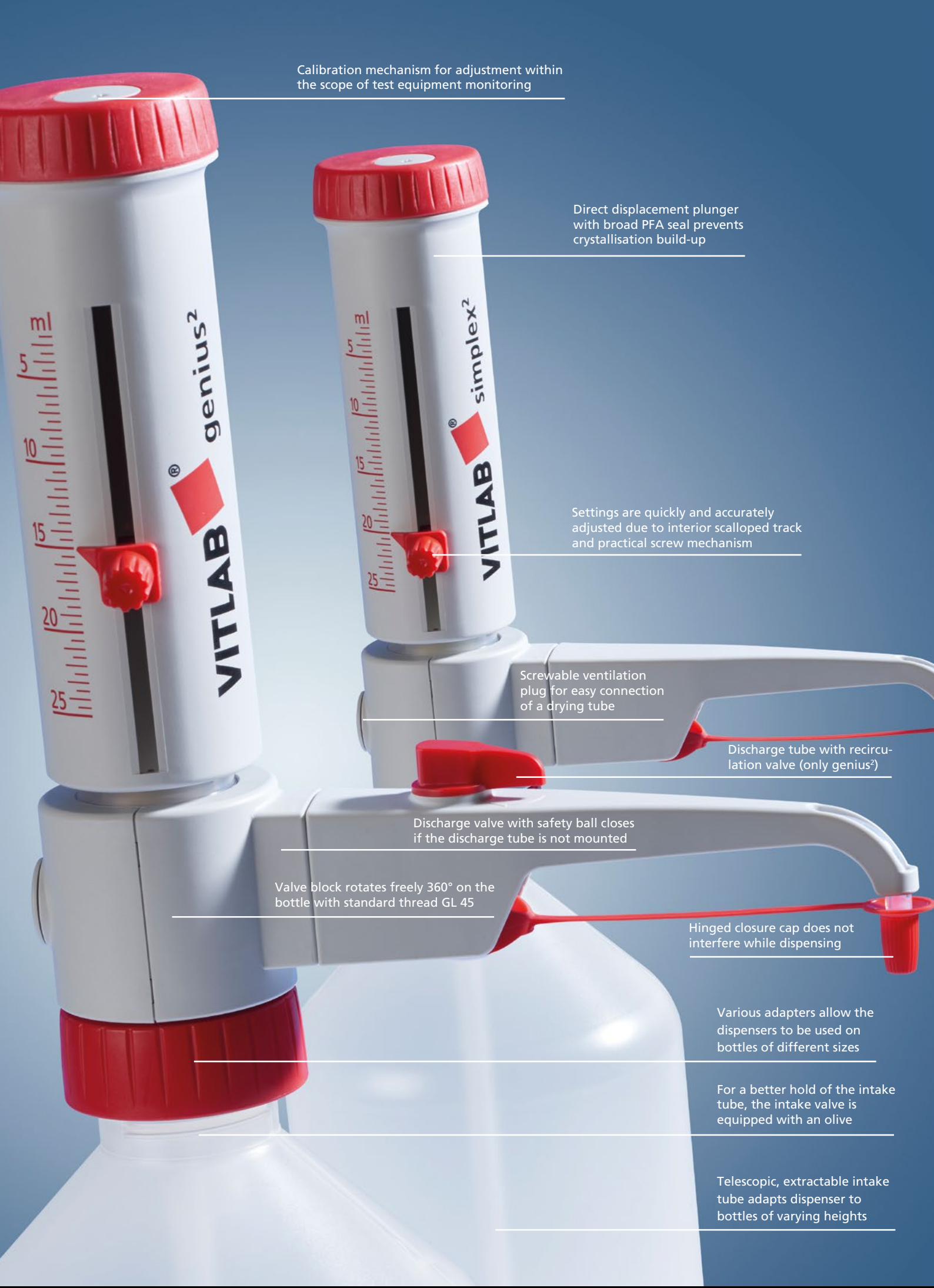
VITLAB® genius² and simplex² bottle-top dispensers are a family of instruments with proven precision that offer many advantages in routine liquid-handling operations. VITLAB® genius² and simplex² instruments can be used for practically any task and are suitable for organic and inorganic solutions, while VITLAB® TA² dispensers have been specially developed for use in trace analysis and with highly concentrated media. As they are produced from materials with extremely high chemical resistance (e.g. PTFE, PFA, FEP, borosilicate glass and platinum-iridium), VITLAB® bottle-top dispensers are very robust and reliable and resistant against most acids, bases and organic solvents.

	VITLAB® genius² / simplex² / simplex²$_{fix}$	VITLAB® TA²
Applications	Salt solutions, acids, bases, and many organic solvents	Specially for use in trace analysis for dispensing high-purity and highly concentrated acids and alkalis, as well as hydrogen peroxide, bromine and HF
Components in contact with media	Borosilicate glass, Al_2O_3-ceramic, FEP, ETFE, PFA, PTFE, platinum-iridium, PP (screw cap)	Various fluoroplastics (e.g., ETFE, FEP, PFA, PCTFE, PTFE), Al_2O_3-sapphire, platinum-iridium or tantalum (depending on the model)
Operating limits	Temperature: +15 °C to +40 °C Steam pressure: max. 600 mbar Viscosity: max. 500 mm²/s Density: max. 2.2 g/cm³	Temperature: +15 °C to +40 °C Steam pressure: max. 600 mbar Viscosity: max. 500 mm²/s Density: max. 3.8 g/cm³

* Dynamic viscosity [mPas] = kinematic viscosity [mm²/s] x density [g/cm³]

General guide for dispenser selection (for the classification of dispenser media, see page 18).

Salt solutions	Acids and bases	Solvents	High-purity and highly concentrated acids and bases	Hydrofluoric acid (HF), bromine, hydrogen peroxide
VITLAB® genius²/simplex²		VITLAB® genius²/simplex²		
			VITLAB® TA²	


Calibration mechanism for adjustment within the scope of test equipment monitoring
Direct displacement plunger with broad PFA seal prevents crystallisation build-up
Settings are quickly and accurately adjusted due to interior scalloped track and practical screw mechanism
Screwable ventilation plug for easy connection of a drying tube
Discharge tube with recirculation valve (only genius²)
Discharge valve with safety ball closes if the discharge tube is not mounted
Valve block rotates freely 360° on the bottle with standard thread GL 45
Hinged closure cap does not interfere while dispensing
Various adapters allow the dispensers to be used on bottles of different sizes
For a better hold of the intake tube, the intake valve is equipped with an olive
Telescopic, extractable intake tube adapts dispenser to bottles of varying heights
VITLAB genius²
VITLAB simplex²
ml
5
10
15
20
25

Recommended usage ranges for VITLAB® genius² and VITLAB® simplex²:

	Medium		Medium		Medium
O	Acetaldehyde	O	Cresol	O	Methyl ethyl ketone
O	Acetic acid, ≤ 96%	O	Cumene (Isopropylbenzene)	O	Methyl formate
O	Acetone	O	Cyclohexanone	O	Methyl propyl ketone
O	Acetonitrile	O	Decane	O	Mineral oil (Motor oil)
O	Acetylacetone	O	1-Decanol	O	Monochloroacetic acid, ≤ 50%
O	Acrylic acid	O	Diethylene glycol	I	Nitric acid, ≤ 60%*/**
O	Acrylonitrile	O	Dibenzyl ether	O	Nitrobenzene
O	Adipic acid	O	Dichlorobenzene	O	Octane
O	Allyl alcohol	O	Dichloroethane	O	Oleic acid
I	Aluminium chloride	O	Diethanolamine	O	Oxalic acid
O	Amino acid	O	Diethyl ether	I	Perchloric acid
I	Ammonium chloride	O	Diethylamine	O	Petroleum
I	Ammonium fluoride	O	1,2 Diethylbenzene	O	Phenol
I	Ammonium hydroxide, ≤ 20%	O	Dimethyl sulphoxide (DMSO)	O	Phenylethanol
I	Ammonium sulphate	O	Dimethylaniline	O	Phenylhydrazine
O	Amyl acetate	O	Dimethylformamide (DMF)	I	Phosphoric acid, ≤ 85%
O	Amyl alcohol (Pentanol)	O	1,4 Dioxane	I	Phosphoric acid, 85% + sulphuric acid, 98%,1:1
O	Amyl chloride (Chloropentane)	O	Diphenyl ether	O	Piperidine
O	Aniline	O	Ethanol	I	Potassium chloride
I	Barium chloride	O	Ethanolamine	I	Potassium dichromate
O	Benzaldehyde	O	Ethyl acetate	I	Potassium hydroxide
O	Benzene	O	Formaldehyde, ≤ 40%	I	Potassium permanganate
O	Benzoyl chloride	O	Formamide	O	Propanol
O	Benzyl alcohol	O	Formic acid	O	Propionic acid
O	Benzyl chloride	O	Gasoline	O	Propylene glycol (Propanediol)
O	Benzylamine	O	Glacial acetic acid	O	Propylene oxide
I	Boric acid, ≤ 10%	O	Glycerine	O	Pyridine
O	Bromobenzene	O	Glycol (Ethylene glycol)	O	Pyruvic acid
O	Bromonaphthalene	O	Glycolic acid, 50%	O	Salicylaldehyde
O	Butanediol	O	Heating oil (Diesel oil)	O	Salicylic acid
O	1-Butanol	O	Hexane	O	Silver acetate
O	n-Butyl acetate	O	Hexanoic acid	I	Silver nitrate
O	Butyl methyl ether	O	Hexanol	O	Sodium acetate
O	Butylamine	I	Hydrochloric acid, ≤ 37%**	I	Sodium chloride
O	Butyric acid	I	Hydroiodic acid, ≤ 57%**	I	Sodium dichromate
I	Calcium carbonate	I	Iodine / potassium iodide solution	I	Sodium fluoride
I	Calcium chloride	O	Isoamyl alcohol	I	Sodium hydroxide, ≤ 30%
I	Calcium hydroxide	O	Isobutanol	I	Sodium hypochlorite
I	Calcium hypochlorite	O	Isopropanol (2-propanol)	I	Sulphuric acid, ≤ 98%
O	Chloroacetaldehyde, ≤ 45%	O	Isopropyl ether	O	Tartaric acid
O	Chloroacetic acid	O	Lactic acid	O	Tetramethylammonium hydroxide
O	Chloroacetone	I	Magnesium chloride	O	Toluene
O	Chlorobenzene	I	Mercury chloride	O	Turpentine
O	Chlorobutane	O	Methanol	O	Urea
O	Chloronaphthalene	O	Methoxybenzene	O	Xylene
I	Chromic acid, ≤ 50%	O	Methyl benzoate	I	Zinc chloride, ≤ 10%
I	Chromic-sulphuric acid	O	Methyl butyl ether	I	Zinc sulphate, ≤ 10%
I	Copper sulphate				

The above data have been carefully checked and reflect the current state of knowledge. Always follow the instructions for use that accompany the instrument as well as the reagent manufacturer's instruction manual. In addition to the chemicals listed above, solutions of a wide variety of organic or inorganic salts (e.g., biological buffers), biological detergents, and cell culture media can be dispensed. Should you require information on chemicals not listed, please do not hesitate to contact us. Last updated: 10/15.

* Use ETFE/PTFE bottle adapter

** Use drying tube

I	Inorganic media
O	Organic media