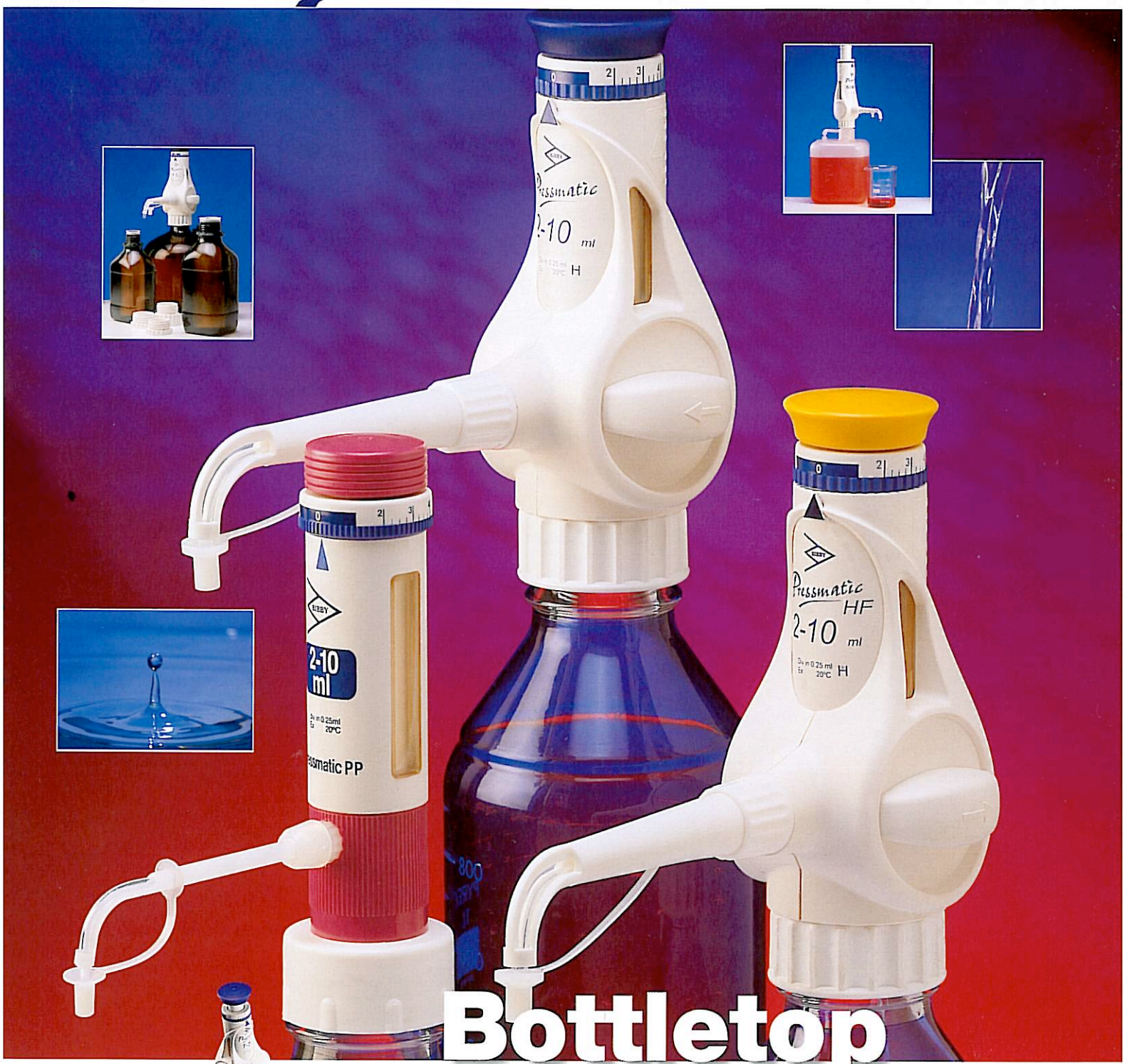
BIBBY

Pressmatic



Bottletop Dispensers

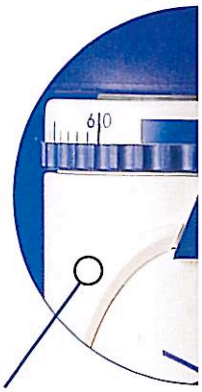
quality in science

Pressmatic PP

The simple construction of the Pressmatic PP provides an affordable, yet easy to use and highly accurate dispenser. This model is based on a polypropylene valve block with a glass piston and barrel and is suitable for use with most aqueous solutions, including buffers, dilute acids and alkalis, biological solutions, polar solvents such as alcohols, acetone or any other liquid compatible with polypropylene.

The Pressmatic PP fits directly onto a 32mm bottle and is also supplied with the following adapters: 40mm (for Merck bottles), 45mm (for GL45 bottles) and 28mm.

- ***Economical Polypropylene mechanism***
- ***Ideal for routine dispensing of non-aggressive liquids***
- ***Available in two sizes***



Volume selected by easy to use graduated ring.

Economical polypropylene mechanism for dispensing non-aggressive solutions.

Integral drip cap.

Clear window allows easy observation of barrel during priming.

Commonly used 32mm thread: three adapters supplied as standard fit almost all types of reagent bottle

Reliable, precision dispensing

Pressmatic R

The high specification and innovative design of the Pressmatic R makes it the ideal dispenser for most solutions, including concentrated acid and alkali reagents. The liquid pathway in this model is made of glass, PTFE and ceramic, offering high chemical resistance.

To avoid reagent wastage and to improve user safety a new recirculation system returns solution used for priming back into the bottle. The Pressmatic R fits directly onto a 45mm bottle and is also supplied with the following adapters: 40mm (for Merck bottles). 32mm (for common laboratory bottles) and 28mm.

Enlarged piston grip

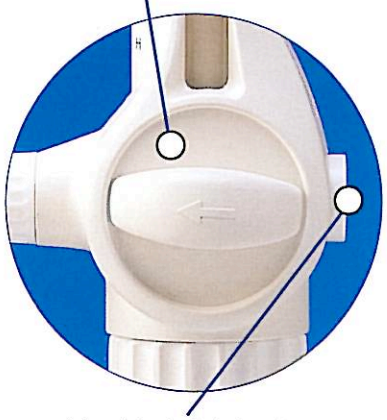
Innovative piston engineering means no dismantling required for autoclaving

Glass and ceramic pathway allows use with most solutions including concentrated acids and alkalis.

Secure housing for drip cap when not in use.

Recirculation system delivers reagent used for priming back into the bottle for re-use.

- ***Precision formed glass and ceramic mechanism***
- ***High chemical resistance***
- ***Innovative recirculation system***
- ***Fully rotational for optimum positioning***
- ***Available in six sizes***



Robust 45mm thread (also supplied with three adapters)

The dispenser can be rotated through 360° on the bottle neck.

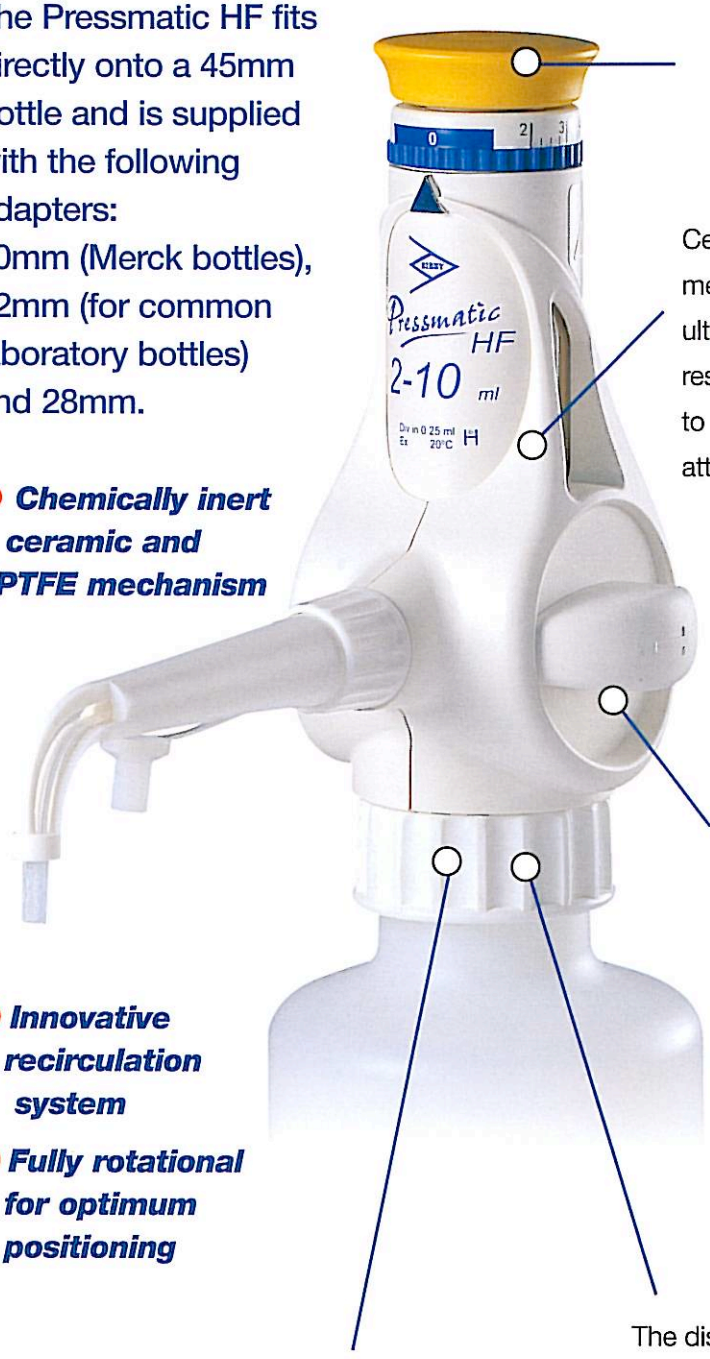
Moulded air inlet fits a standard syringe filter for sterile dispensing

Pressmatic HF

The dispensing mechanism of the Pressmatic HF is designed to handle highly aggressive liquids, including hydrofluoric acid. The piston, barrel and valves are made from chemically inert ceramic, the valve block and tubes from PTFE.

The Pressmatic HF fits directly onto a 45mm bottle and is supplied with the following adapters:
40mm (Merck bottles),
32mm (for common laboratory bottles)
and 28mm.

- ***Chemically inert ceramic and PTFE mechanism***
- ***Innovative recirculation system***
- ***Fully rotational for optimum positioning***



Enlarged piston grip

Ceramic and PTFE mechanism gives ultimate chemical resistance, even to reagents that attack glass.

Recirculation system delivers reagent used for priming back into the bottle for re-use.

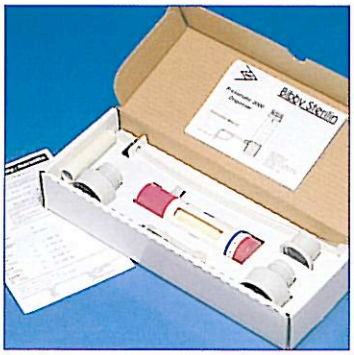
Robust 45mm thread (also supplied with three adapters)

The dispenser can be rotated through 360° on the bottle neck for optimum positioning.

Fast, accurate, easy operation

TO SET the volume, rotate the graduated ring to the required position. Once selected the set volume is automatically locked in position, preventing accidental adjustment.

TO DISPENSE, pull the piston up to the top position and eject the set volume by pushing down.



Each PRESSMATIC dispenser is supplied complete with three adapters, a Bibby Sterilin Guarantee / Calibration certificate and an instruction manual. A tool is also provided for removing valves.

Liquid assets

Precise liquid dispensing is such an important part of sample preparation that it is essential that the tools you use are accurate, reliable and easy to operate. The new range of Pressmatic® dispensers combine all of these features and more, with a choice of three levels of chemical resistance to suit almost any dispensing requirement.

The Pressmatic® is very easy to use. Simply set the required volume on a rotating graduated ring; once set, the ring locks into place to prevent accidental adjustment. A clear window allows you to check the cylinder for air bubbles. To dispense, pull the piston up then push down.

The high precision Pressmatic® is accurate to better than 0.7% and is ideal for repeat dispensing (repeatability better than 0.1%). Each unit is individually tested and supplied with a calibration certificate for guaranteed accuracy.

The Pressmatic® is designed for problem-free maintenance. The units are simple to take apart for cleaning purposes; all valves and tubes are replaceable and the unit is fully autoclavable up to 121°C, 2 bar. An integral drip cap is fitted as standard. The Pressmatic® is connectable to almost any type of laboratory vessel; every unit is supplied with a robust screwthread plus three adapters as standard. A full range of bottles are also available as accessories.

Technical specification & ordering information

Pressmatic **PP**

Cat. No.	Capacity, ml	Subdivisions, ml	Repeatability, %	Accuracy, %
PD10P	2.0 to 10.0	0.25	<0.1	<0.7
PD60P	10.0 to 60.0	1.00	<0.1	<0.7

Spare parts & Accessories

Cat. No.	Description	Cat. No.	Description
PDN1	Discharge tube for PD10P	PD500	Pyrex® bottle, clear glass, 500ml, A32
PDN2	Discharge tube for PD60P	PD500A	Pyrex® bottle, amber glass, 500ml, GL45
PDV1	Discharge valve for PD10P	PD1000	Pyrex® bottle, clear glass, 1000ml, A32
PDV3	Discharge valve for PD60P	PD1000A	Pyrex® bottle, amber glass, 1000ml, GL45
PDN3	Suction tube for PD10P	BNP05B	Azlon® bottle, plastic PP, 5000ml, GL45
PDN4	Suction tube for PD60P		
PDS1	Suction valve for PD10P		
PDS3	Suction valve for PD60P		

Pressmatic **R**

Cat. No.	Capacity, ml	Subdivisions, ml	Repeatability, %	Accuracy, %
PD1R	0.2 to 1.0	0.05	<0.2	<0.7
PD2R	0.4 to 2.0	0.05	<0.1	<0.7
PD5R	1.0 to 5.0	0.10	<0.1	<0.7
PD10R	2.0 to 10.0	0.25	<0.1	<0.7
PD30R	5.0 to 30.0	0.50	<0.1	<0.7
PD60R	10.0 to 60.0	1.00	<0.1	<0.7

Spare parts & Accessories

Cat. No.	Description	Cat. No.	Description
PDN5	Discharge tube	PD500	Pyrex® bottle, clear glass, 500ml, A32
PDV3	Discharge valve	PD500A	Pyrex® bottle, amber glass, 500ml, GL45
PDN4	Suction tube, 310mm	PD1000	Pyrex® bottle, clear glass, 1000ml, A32
PDS3	Suction valve	PD1000A	Pyrex® bottle, amber glass, 1000ml, GL45
PDR1	Recirculation valve	PC1013	0.2µm filter (pack of 10)
PDR2	Recirculation tube	BNP05B	Azlon® bottle, plastic PP, 5000ml, GL45

Pressmatic **HF**

Cat. No.	Capacity, ml	Subdivisions, ml	Repeatability, %	Accuracy, %
PD10R/HF	2.0 to 10.0	0.25	<0.1	<0.7

Spare parts & Accessories

Cat. No.	Description	Cat. No.	Description
PDN5	Discharge tube	PMH1000GL45	Azlon® HDPE plastic bottle, 1000ml, GL45
PDV3/HF	Discharge valve, HF		
PDN4	Suction tube, 310mm		
PDS3/HF	Suction valve, HF		
PDR2	Recirculation tube		
PDR1/HF	Recirculation valve, HF		

PRESSMATIC DISPENSERS Technical Note: T13-002B

Chemical compatibility of Pressmatic dispensers

The following table provides an overview of the chemical resistance of Stuart Pressmatic dispensers. Specifications relating to resistance are divided into the following categories:

1	Resistant
2	Conditionally resistant
3	Non-resistant
-	No data available

Where the unit is rated conditionally resistant it refers to specific usage conditions. For example, when using a particular chemical for a longer time (meaning the chemical will remain in the dispenser for several days) - long term exposure might attack the material; or using the chemical at higher temperatures e.g. 20°C instead of 40°C - an increase in temperature increases the reactivity of the chemical.

Resistance details have been carefully checked and are based on information currently available to us. Our evaluation is not universally applicable in all circumstances, so these details should only be treated as reference values subject to correction. No liability, regardless of the legal premise involved, is borne for the contents. The user bears sole responsibility and should be qualified to an adequate technical level. Information and specifications provided by the chemical manufacturer have priority in all cases and should be heeded at all times (particular attention should be paid to the material safety data sheet in this respect).

Specifications relate exclusively to the resistance of components which convey media and only apply for the chemicals stipulated in pure form or dissolved in water in the specified concentration. Details of the materials utilised in components conveying the media are provided in the operating instructions supplied with each device and these should be checked to ascertain their suitability for the user's specific application. All details relate to a temperature of 20ºC.

Device operating instructions should be heeded. Crystallising of dissolved salts should be avoided. Separate consideration should be given to other chemical properties (e.g. flashpoint, viscosity).

Chemical	Concentration /%	Pressmatic PD-R and PD-R/HF	Pressmatic PD-P	Comments
Acetaldehyde	100	1	2	Note flash point
Acetamide	Saturated	1	1	
Acetic acid	100	1	1	
Acetic acid, glacial	100	1	1	Note melting point
Acetic anhydride	100	1	2	
Acetone	100	1	1	Note flash point
Acetonitrile	100	1	2	Note flash point and vapour pressure
Acetophenone	-	2	2	Note flash point
Acetylchloride	-	1	2	Note flash point
Acetylsalicylic acid	100	1	1	
Acrylic acid	-	1	1	
Acrylonitrile	100	2	2	Note flash point
Adipic acid	Saturated	1	1	
Alcohols	All	1	1	Note flash point
Allyl acetate	100	1	1	Note flash point
Allyl alcohol	100	1	1	
Allyl isothiocyanate	100	1	-	
Aluminium chloride	Saturated	1	1	

Aluminium fluoride	Aqueous	2	2	
Aluminium nitrate	Aqueous	1	1	
Aluminium sulphate	Saturated	1	1	
Amino acids	-	1	1	
Ammonia	26	3	3	
Ammonium acetate	Saturated	1	1	
Ammonium alum	Saturated	1	1	
Ammonium carbonate	50	2	2	
Ammonium chloride	Aqueous	2	2	
Ammonium nitrate	Saturated	1	1	
Ammonium oxalate	-	1	1	
Ammonium sulphate	Solved	1	1	
Ammonium sulphide	Saturated	1	1	
Amyl alcohol	-	1	1	Note flash point
Amyl chloride	-	1	3	
Aniline	100	2	2	
Apple juice	100	1	1	Only without pulp
Arsenic acid	Aqueous	2	2	
Ascorbic acid	100	1	1	
Barium bromide	-	1	1	
Barium chloride	Saturated	1	1	
Barium sulphide	Saturated	2	2	
Battery acid	38	1	1	
Beer	100	1	1	
Benzaldehyde	-	1	2	
Benzene	-	1	2	Note flash point
Benzene sulphonic acid	Saturated	2	2	
Benzoic acid	Saturated	1	1	
Benzoyl chloride	100	1	2	
Benzyl chloride	100	2	3	
Bitter almond oil	100	1	1	
Boric acid	10	1	1	
Brine	Saturated	1	1	Note crystallisation
Bromine	100	3	3	
Butanetriol	100	1	1	
Butanol	100	1	1	
Butyl acetate	100	1	2	
Butyl amine	-	1	2	
Butyl glycol	100	1	1	
Butyl methyl ether	-	1	2	Note flash point
Butyl phenol	100	1	1	
Butyl phenol, p-tert	100	1	1	
Butylene glycol	100	1	1	
Butyric acid	100	1	3	
Calcium acetate	Aqueous	1	1	
Calcium bicarbonate	Saturated	1	1	Note crystallisation
Calcium bisulphite	Saturated	1	1	
Calcium bromide	-	-	1	
Calcium carbonate	Saturated	1	1	
Calcium chlorate	Saturated	1	1	
Calcium chloride	Aqueous	1	1	
Calcium hydroxide	Concentrated	1	1	
Calcium hypochloride	Saturated	2	2	
Calcium nitrate	50	2	2	
Carbon disulphide	-	1	3	Note flash point
Cetyl alcohol	100	1	1	

Chloroacetic acid	50	2	2	
Chlorobenzene	-	1	3	
Chlorobutane	100	1	-	Note flash point
Chloroethane	100	1	3	Note flash point, boiling point
Chloroethanol	100	1	3	
Chloroform	100	2	3	Note vapour pressure
Chlorosulphonic acid	-	1	3	
Chrome alum	Saturated	1	1	
Chromic acid	50	3	3	
Chromosulphuric acid	Concentrated	3	3	
Citric acid	Saturated	1	1	
Citric juice	100	1	1	
Cresol	-	2	2	
Cyclohexane	100	1	2	Note flash point
Cyclohexanol	100	1	2	
Cyclohexanone	100	1	2	Note flash point
Cyclopentane	-	1	2	Note flash point
Decane	100	1	2	Note flash point
Dehydroacetic acid	-	2	-	Generates insoluble salts
Detergents	-	1	1	
Diacetone alcohol	-	1	1	
1,2-Dibromoethane (EDB)	-	2	3	
Dibutylphthalate	-	1	1	
Dichlorobenzene	-	1	3	
Dichloroacetic acid	-	3	3	
Dichlorodifluoromethane	100	3	3	
Dichloroethane	-	1	3	
Dichloromethane	100	2	2	Note vapour pressure, flash point
Diethyl ether	100	1	2	Note flash point
Diethyl ketone	-	2	2	Note flash point
Diethylene glycol	100	2	2	
Dimethylaniline	-	1	3	
Dimethylformamide (DMF)	100	1	1	Note vapour pressure, flash point
1,4-Dioxane	100	1	2	Note flash point
Ethyl acetate	100	1	2	
Ethanol	100	1	1	Note flash point
Ethylbenzene	100	2	3	Note flash point
2-Ethylhexanol	-	1	1	
Ethylenediamine	100	2	1	Note flash point
Ethylene glycol	100	1	1	
Ethylenediaminetetra-aceticacid (EDTA)	-	1	1	
Ferric/ferrous chlorides	Saturated	1	1	
Ferric/ferrous nitrates	Saturated	1	1	
Ferric/ferrous sulphates	Saturated	1	1	
Fluorosilicic acid	32	2	2	
Formaldehyde	40	1	1	Note vapour pressure, boiling point
Formic acid	100	1	1	
Fructose	Saturated	1	1	
Fruit juice	100	1	1	Only without pulp
Gas oil	-	1	1	
Gelatine	All	1	1	
Glucose	Saturated	1	1	
Glycerol	100	1	1	Note viscosity

Glycine	10	1	1	
Glycolic acid	50	3	3	
Heptane	100	1	2	Note flash point
1-Heptanol	-	1	-	
Heptanone	-	1	-	Note flash point
Hexane	100	1	2	Note flash point
Hexanol	100	1	1	Note flash point
Hydrobromic acid	50	3	3	
Hydrochloric acid	37	3	3	
Hydrofluoric acid	50	3	3	Only PD-R/HF
Hydrogen peroxide	90	3	3	
Hydrogen sulphide	Saturated	1	1	
Isoamyl alcohol	-	1	1	Note flash point
Isobutanol	100	1	1	Note flash point
Isooctane	100	1	1	Note flash point
Isopropylacetate	100	1	2	Note flash point
Isopropyl ether	100	1	2	Note flash point
Kerosene (Paraffin)	100	1	2	Note flash point
Lactic acid	85	1	1	
Lactose	Aqueous	1	1	
Magnesium carbonate	Saturated	1	1	
Magnesium chloride	Saturated	1	1	
Magnesium hydroxide	Saturated	1	1	
Magnesium nitrate	Saturated	1	1	
Magnesium sulphate	All	3	3	
Maleic acid	Saturated	1	1	
Mercury (II) chloride	Aqueous	3	3	
Mercury (II) cyanide	Saturated	1	1	
Mercury nitrate	Saturated	1	1	
Methyl acetate	100	1	2	
Methanol	100	1	1	Note vapour pressure and flash point
Methyl ethyl ketone (MEK)	-	1	1	Note flash point
Methyl formate	-	2	-	Note flash point and boiling point
Methyl propyl ketone	-	1	1	Note flash point
Mineral water	100	1	1	
Naphtha	100	1	2	Note flash point
Nickel chloride	Saturated	1	1	
Nickel nitrate	Saturated	1	1	
Nickel sulphate	Saturated	3	3	
Nitric acid	70	3	3	
Nitrobenzene	100	3	3	
Nitrohydrochloric acid (Aqua regia)	-	3	3	
Octane	100	1	1	Note flash point
Orange juice	100	1	1	Only without pulp
Oxalic acid	Aqueous	3	3	
Pentane	100	1	3	Note flash point and boiling point
Petrol	-	1	2	Note flash point
Phosphoric acid	85	1	1	
Phosphorous trichloride	-	1	1	
Phthalic acid	Saturated	1	1	
Pineapple juice	-	1	1	Only without pulp
Potassium acetate	Aqueous	1	1	
Potassium aluminium sulphate	Saturated	2	2	

Potassium bromide	All	1	1	
Potassium carbonate	Saturated	1	1	
Potassium chlorate	Saturated	2	1	
Potassium chloride	Aqueous	1	1	
Potassium chromate	Saturated	3	1	
Potassium cyanide	Saturated	2	2	
Potassium dichromate	Aqueous	2	2	
Potassium hydroxide	Concentrated	3	3	
Potassium iodide	Saturated	1	1	
Potassium nitrate	50	2	2	
Potassium perchlorate	Saturated	1	1	
Potassium permanganate	Aqueous	1	1	
Potassium sulphate	Aqueous	2	2	
Potassium sulphide	In solution	2	2	
Potassium sulphite	Saturated	2	2	
Potassium thiosulphate	In solution	1	1	
Propanol	100	1	2	Note flash point
2-Propanol	100	1	2	Note flash point
Propylene oxide	-	3	2	Note flash point
Pyridine	100	2	2	Note flash point
Salicylic acid	Saturated	1	1	
Sea water	-	1	1	Note crystallisation
Silicone oil	-	1	1	Note viscosity
Silver nitrate	In solution	1	1	Note crystallisation
Soap solution	All	1	1	
Sodium acetate	All	1	1	
Sodium chloride	All	1	1	Note crystallisation
Sodium disulphate	In solution	1	1	Note crystallisation
Sodium fluoride	Saturated	1	1	
Sodium hydroxide	50	2	2	Note crystallisation
Sodium hypochlorite	15	1	2	
Sodium nitrate	Saturated	2	2	
Sodium nitrite	Saturated	1	1	
Sodium phosphate	Saturated	1	1	
Sodium silicates	All	1	1	
Sodium sulphate	Saturated	2	2	
Sodium sulphide	Saturated	2	2	
Sodium sulphite	1M	1	1	
Sodium thiosulphate	In solution	1	1	
Soja (soybean) oil	100	1	1	
Spirits	100	1	1	Note flash point
Starch solution	All	1	1	
Succinic acid	Saturated	1	1	
Sugar beet juice	100	1	1	
Sulphur chloride	-	3	3	
Sulphuric acid	98	1	3	
Sulphurous acid	Saturated	3	3	
Tartaric acid	-	3	3	
Tetrachloroethane	100	3	3	
Tetrachloromethane	100	1	3	
Tetrahydrofuran	100	2	3	Note boiling point and flash point
Tin (II) chloride	Saturated	3	3	
Tin (IV) chloride	Aqueous	3	3	
Toluene	-	1	3	Note flash point
Trichloroacetic acid	-	2	2	

Trichloroethane	100	1	3	
Trichloroethylene	100	1	3	
Trichlorotrifluoroethane	100	2	3	Note vapour pressure
Triethanolamine	100	1	1	
Trifluoroacetic acid	-	2	-	Note vapour pressure
Turpentine	100	1	3	Note flash point
Urea	Saturated	1	1	
Uric acid	-	1	1	
Urine	-	1	1	
Washing agents	100	1	1	
Water	-	1	1	
Water-glass	Saturated	1	1	
Xylene	-	1	3	Note flash point
Zinc bromide	-	1	1	
Zinc chloride	10	1	1	
Zinc sulphate	In solution	1	1	

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Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct.
If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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