

# Calibrex™

your choice for flexibility and performance

## bottle-top dispensers

*additional  
volumes*

The Calibrex™ line includes a large selection of robust dosing instruments with excellent chemical resistance, high performance and simplified maintenance. Intended for the safe and reproducible liquid distribution in volumes ranging from 0.1 mL to 100 mL.

Choose from three different models ; whatever the application, there will be a Calibrex™ fitting your needs.

### The Calibrex™ line features:

- Selection between three different models
- Colour coding identification
- Integrated calibration key
- Long lasting performance stability
- QR coded chemical compatibility
- Quick disassembling, no tool needed
- Autoclavable at 121° C fully assembled



### The Calibrex™ models

**520** **525** **530**  
universal organo solutae

 **SOCOREX**  
SWISS



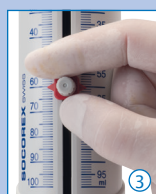
# Calibrex™ *organo / solutae*

your choice for flexibility and performance



## ► Ease of use ①

Smooth aspiration and distribution for trouble-free routine dispensing. Dual scale enables volume reading from a wide angle.



## ► Volume setting

Spring loaded sliding cursor ② softly moves up and down dual scale and precisely stops at desired graduation. Easy exchange for the alternative classical screw button ③, available as accessory.



## ► Permanent visibility ④

Safety transparent thick sleeve around barrel and delivery jet window allow liquid flow monitoring.

## ► Optimal working position ⑤

The instrument rotates 360° for adequate positioning on the bottle. Freely rotating dispenser body makes volume clearly visible from any position.



## ► Robustness

Glass barrel with thick wall contributes to overall dispenser robustness.

## Calibrex™ *organo*

Calibrex™ *organo* 525 includes a ground glass or ceramic plunger, both suited for organics and non-crystallizing acid and base solutions.

# 525

*organo*

0.1 – 1 mL  
0.25 – 2.5 mL  
0.5 – 5 mL  
1 – 10 mL  
2.5 – 25 mL  
5 – 50 mL  
10 – 100 mL



Calibration safety seal sticker

Integrated calibration key under cap

Dual graduation

Volume adjustment sliding cursor



Ground glass plunger

Disassembling nut, no tool needed

Air inlet for filter connection

Shock absorbing flexible connexion

Screw-locking stopper

## Superior material selection

Parts in contact with liquid flow are chemically inert, providing for stability and long instrument life.

| Parts                    | 525 <i>organo</i>  | 530 <i>solutae</i> |
|--------------------------|--------------------|--------------------|
| Feed tubing 1 to 10 mL   | PTFE               |                    |
| Feed tubing 25 to 100 mL | FEP                |                    |
| Valve body               | Ceramic            |                    |
| Valve balls 1 to 10 mL   | Pyrex glass        |                    |
| Valve balls 25 to 100 mL | Ceramic            |                    |
| Valve spring             | Platinum-iridium   |                    |
| Valve plate              | PTFE               |                    |
| Barrel                   | Borosilicate glass |                    |
| Plunger 1 to 5 mL        | Ceramic            | PFA coated ceramic |
| Plunger 10 to 100 mL     | Ground glass       | PFA coated glass   |
| Connecting body          | ETFE               |                    |
| Delivery jet             | FEP/PCTFE          |                    |
| Stopper                  | ETFE               |                    |



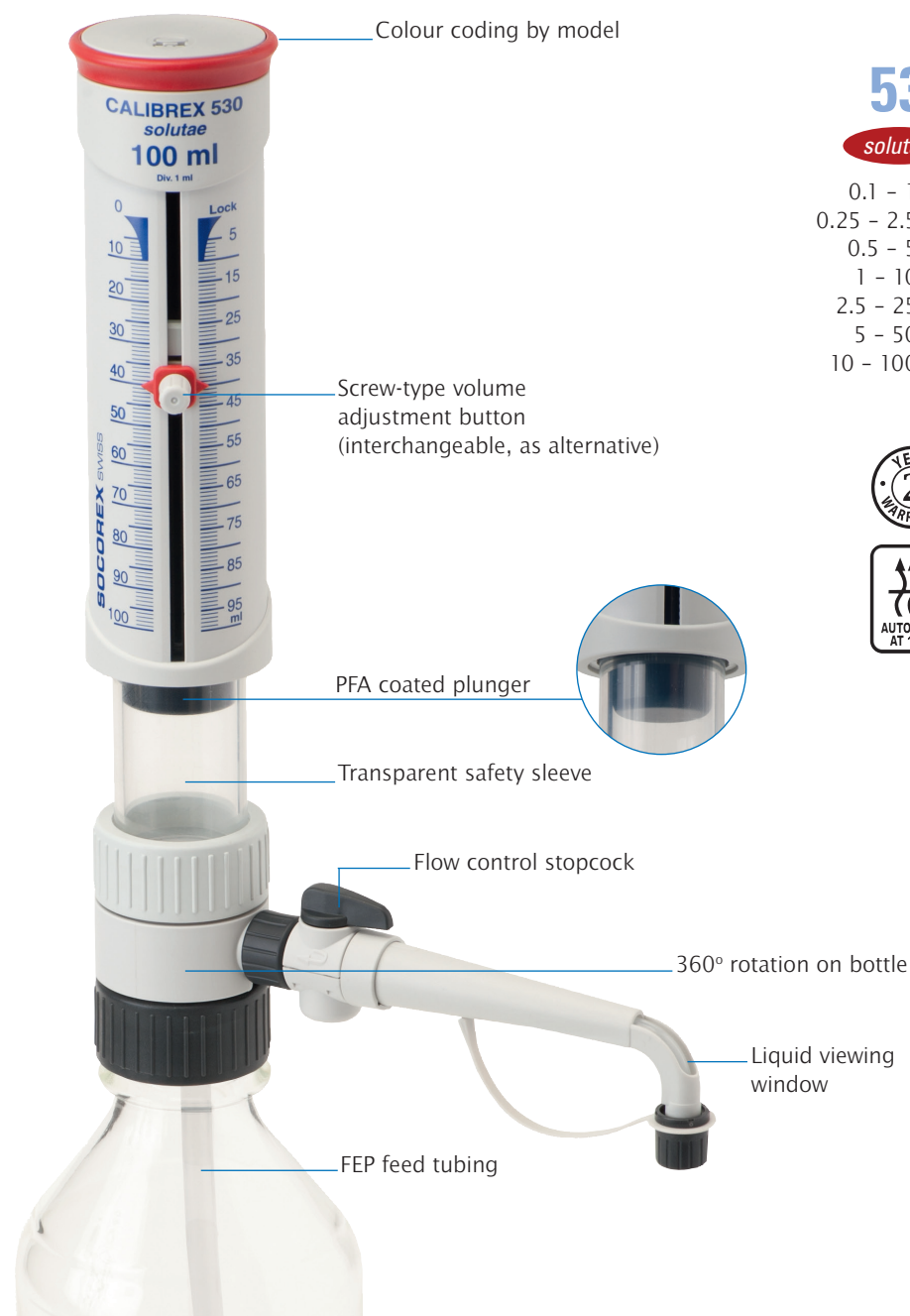
## Chemical resistance ⑦

Printed QR code for instant access to chemical resistance chart.



## Calibrex™ solutae

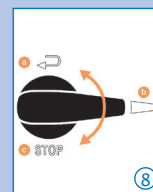
Calibrex™ solutae 530 has a glass or ceramic PFA coated plunger preventing the crystallization of chemicals. It enables trouble free distribution of salt solutions, weak and strong acids, as well as bases.



# 530

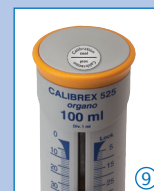
solutae

0.1 – 1 mL  
0.25 – 2.5 mL  
0.5 – 5 mL  
1 – 10 mL  
2.5 – 25 mL  
5 – 50 mL  
10 – 100 mL



### ► Flow control stopcock ⑧

Both 525 and 530 models are available with or without stopcock, adding flexibility to safety. Next to its dispensing position (b), device enables liquid priming and recycling (a) without reagent loss or contamination. Locking position (c) for safe dispenser transportation.



### ► Easy In-lab calibration ⑨

Access to mechanism protected by safety seal sticker. Integrated key located under plunger cap. Engraved +/- arrows for easy and precise setting. Spare seal stickers are available.



### ► Maintenance ⑩

Disassembling/reassembling facilitated by limited number of elements – no tool needed. Key parts such as valves, plunger, barrel and delivery jet are removable in seconds for cleaning. Fully autoclavable at 121°C / 250°F.



### ► Air filter ⑪

Air inlet can be enlarged to receive a Luer membrane filter, if airborne contamination is a concern.

## Performance – Calibrex™ 525 and 530

| Volume mL  | Division mL | Inaccuracy (E%) |           |           | Imprecision (CV%) |           |           |
|------------|-------------|-----------------|-----------|-----------|-------------------|-----------|-----------|
|            |             | Min. vol.       | Mid. vol. | Max. vol. | Min. vol.         | Mid. vol. | Max. vol. |
| 0.1 – 1    | 0.02        | <+/- 3.0%       | <+/- 1.8% | <+/- 0.6% | < 1.2%            | < 0.7%    | < 0.17%   |
| 0.25 – 2.5 | 0.05        | <+/- 2.7%       | <+/- 1.6% | <+/- 0.6% | < 0.9%            | < 0.55%   | < 0.17%   |
| 0.5 – 5    | 0.1         | <+/- 2.0%       | <+/- 1.3% | <+/- 0.6% | < 0.5%            | < 0.35%   | < 0.1%    |
| 1 – 10     | 0.2         | <+/- 1.5%       | <+/- 1.2% | <+/- 0.6% | < 0.5%            | < 0.35%   | < 0.1%    |
| 2.5 – 25   | 0.5         | <+/- 1.5%       | <+/- 1.1% | <+/- 0.6% | < 0.5%            | < 0.35%   | < 0.1%    |
| 5 – 50     | 1.0         | <+/- 1.5%       | <+/- 1.1% | <+/- 0.6% | < 0.5%            | < 0.35%   | < 0.1%    |
| 10 – 100   | 1.0         | <+/- 1.5%       | <+/- 1.1% | <+/- 0.6% | < 0.5%            | < 0.35%   | < 0.1%    |

Performance values obtained by a smooth and steady pace movement, with bidest water at constant temperature ( $\pm 0.5^\circ\text{C}$ ) comprised between 20 and  $25^\circ\text{C}$ , according to EN ISO 8655.

Warning: omission to untighten connecting body ring before autoclaving, and/or over-tightening ring when dispensing, may reduce performance.

# Calibrex™ universal

your choice for flexibility and performance



- **Friendly volume setting** ①
- Fast and precise adjustment. Efficient click-stop mechanism prevents unwanted alteration. Large display is easy to read; the window adjusts to desired side of instrument body. Each step on the cylindrical cam is pre-calibrated and corresponds to one division on the volume graduation.



- **Optimized working position** ②
- The instrument rotates 360° for adequate positioning on top of the bottle.
- **Air filter** ③
- Air inlet can be enlarged to receive a Luer membrane filter, if airborne contamination is a concern.



- **In-lab calibration** ④
- Dispensers are factory calibrated and can be easily recalibrated. Integrated adjustment screw bears clear setting indications.
- **Easy maintenance** ⑤
- Disassembling/reassembling is facilitated by the limited number of elements – no tool needed. Fully autoclavable at 121°C / 250°F.

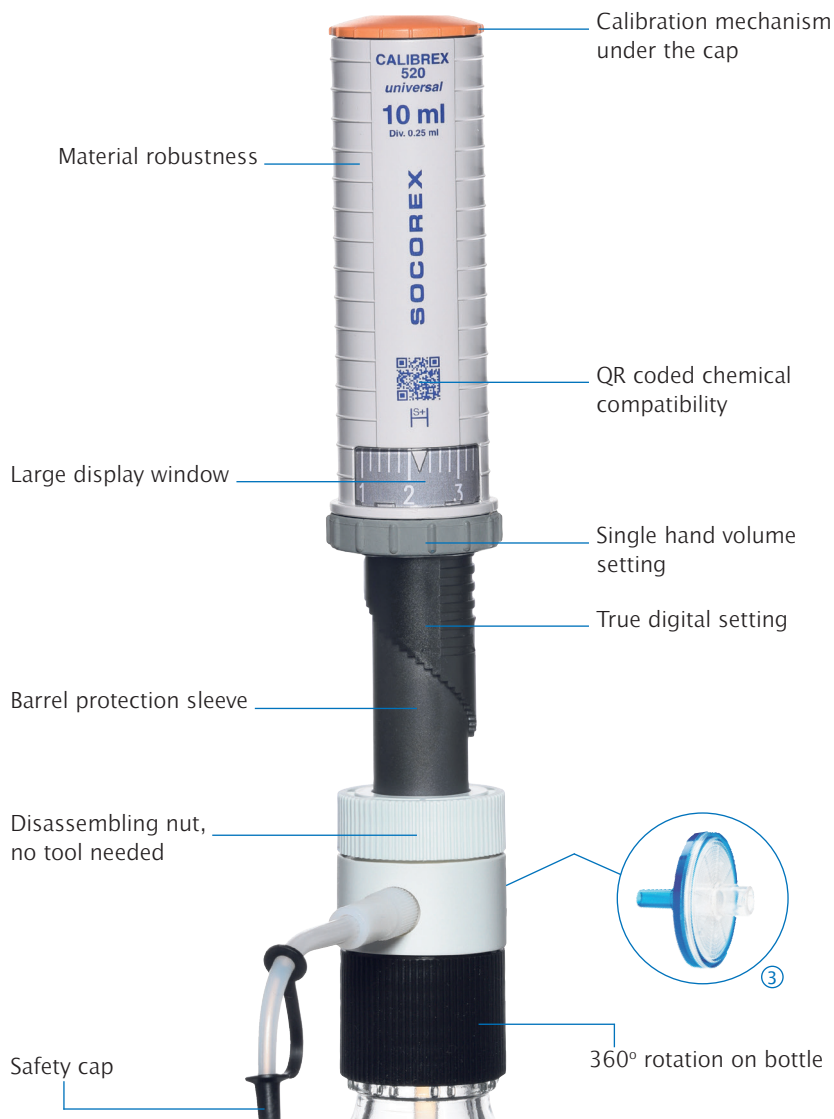
## Calibrex™ universal

Calibrex™ universal 520 has a PFA coated plunger preventing the crystallization of chemicals. Made of high-tech materials, it provides for broad chemical resistance and is universally adapted for most laboratory reagents.

### 520

universal

0.25 – 2 mL  
1 – 5 mL  
1 – 10 mL



## Superior material selection

Special attention is paid to component materials, providing for long instrument life. Parts coming in contact with the liquid flow are chemically inert.

## Chemical resistance

Printed QR code for instant access to chemical resistance chart.



| Parts                 | Materials              |
|-----------------------|------------------------|
| Feed tube             | PTFE                   |
| Intake valve          | Ceramic                |
| Valve balls           | Pyrex glass            |
| Valve spring          | Platinum-iridium       |
| Barrel                | Borosilicate glass     |
| Barrel plate / base   | PTFE                   |
| Plunger               | Glass with PFA coating |
| Outlet valve          | Ceramic                |
| Body                  | ETFE                   |
| Delivery jet assembly | PTFE/ETFE              |

## Performance – Calibrex™ 520

| Volume mL | Division mL | Inaccuracy (E%) |           |           | Imprecision (CV%) |           |           |
|-----------|-------------|-----------------|-----------|-----------|-------------------|-----------|-----------|
|           |             | Min. vol.       | Mid. vol. | Max. vol. | Min. vol.         | Mid. vol. | Max. vol. |
| 0.25 – 2  | 0.05        | < ± 3.0%        | < ± 1.8%  | < ± 0.6%  | < 0.5%            | < 0.35%   | < 0.1%    |
| 1 – 5     | 0.1         | < ± 2.0%        | < ± 1.3%  | < ± 0.6%  | < 0.5%            | < 0.35%   | < 0.1%    |
| 1 – 10    | 0.25        | < ± 1.5%        | < ± 1.1%  | < ± 0.6%  | < 0.5%            | < 0.35%   | < 0.1%    |

Performance values obtained with bidest water at constant temperature ( $\pm 0.5^\circ\text{C}$ ) comprised between 20 and 25°C in accordance with ISO 8655.



## Accessories for Calibrex™ dispensers



### Ordering information - Accessories

| Description                                   | Packaging | Cat. No.  |
|-----------------------------------------------|-----------|-----------|
| <b>Work station for dispenser stability ①</b> |           |           |
| Fits Calibrex™ 520 dispenser                  | 1/pk      | 320.SB050 |
| Fits Calibrex™ 525/530 dispensers             | 1/pk      | 320.SB100 |

|                                                                                                 |      |           |
|-------------------------------------------------------------------------------------------------|------|-----------|
| <b>Remote aspiration work station and feed tubing set ②</b>                                     |      |           |
| Fits Calibrex™ 520 dispenser*                                                                   | 1/pk | 320.BC050 |
| Fits Calibrex™ 525/530 dispensers* as of 25 mL                                                  | 1/pk | 320.BC100 |
| Feed tubing set, 2.5 m with connector for remote aspiration, fits Calibrex™ 525/530 as of 25 mL | 1/pk | 1.525.581 |

\* Dispenser and feed tubing / connector to be ordered separately

| Description                            | Material  | Length | int. Ø | Cat. No.  |
|----------------------------------------|-----------|--------|--------|-----------|
| <b>Extension tubing and Jet-Pen™ ③</b> |           |        |        |           |
| Fits Calibrex™ 520                     | PTFE      | 600 mm | 2.2 mm | 1.524     |
| Fits Calibrex™ 525/530, up to 10 mL    | FEP/PCTFE | 600 mm | 4 mm   | 1.525.610 |
| Fits Calibrex™ 525/530, 25 mL          | FEP/PCTFE | 600 mm | 4 mm   | 1.525.625 |
| Fits Calibrex™ 525/530, 50 and 100 mL  | FEP/PCTFE | 600 mm | 4 mm   | 1.525.650 |

| Description                                          | Packaging | Cat. No.  |
|------------------------------------------------------|-----------|-----------|
| <b>Flow control stopcock for Calibrex™ 525/530 ④</b> |           |           |
| Fits models up to 10 mL                              | 1/pk      | 1.525.544 |
| Fits models as of 25 mL                              | 1/pk      | 1.525.546 |

|                                                              |      |           |
|--------------------------------------------------------------|------|-----------|
| <b>Delivery jet assembly, 90 mm, for Calibrex™ 525/530 ⑤</b> |      |           |
| Fits 1 mL model                                              | 1/pk | 1.525.090 |
| Fits 2.5, 5 and 10 mL models                                 | 1/pk | 1.525.091 |

|                                                               |      |           |
|---------------------------------------------------------------|------|-----------|
| <b>Delivery jet assembly, 120 mm, for Calibrex™ 525/530 ⑤</b> |      |           |
| Fits 25 mL model                                              | 1/pk | 1.525.120 |
| Fits 50 and 100 mL models                                     | 1/pk | 1.525.121 |

|                                                                         |      |           |
|-------------------------------------------------------------------------|------|-----------|
| <b>Delivery jet assembly, extended, 120 mm, for Calibrex™ 525/530 ⑤</b> |      |           |
| Fits 1 mL models                                                        | 1/pk | 1.525.123 |
| Fits 2.5, 5 and 10 mL models                                            | 1/pk | 1.525.125 |

|                                                                         |      |           |
|-------------------------------------------------------------------------|------|-----------|
| <b>Delivery jet assembly, extended, 150 mm, for Calibrex™ 525/530 ⑤</b> |      |           |
| Fits 25 mL models                                                       | 1/pk | 1.525.150 |
| Fits 50 and 100 mL models                                               | 1/pk | 1.525.151 |

| Description                               | Colour | Packaging | Cat. No.  |
|-------------------------------------------|--------|-----------|-----------|
| <b>Screw type volume setting button ⑥</b> |        |           |           |
| Fits Calibrex™ 525 dispensers             | Yellow | 1/pk      | 1.525.918 |
| Fits Calibrex™ 530 dispensers             | Red    | 1/pk      | 1.530.918 |

| Description                                                 | Length  | int. Ø | Cat. No. |
|-------------------------------------------------------------|---------|--------|----------|
| <b>Replacement feed tubing, PTFE ⑦</b>                      |         |        |          |
| Fits Calibrex™ 520/525/530 up to 10 mL, cut                 | 300 mm  | 5 mm   | 511.707  |
| Fits Calibrex™ 520/525/530 up to 10 mL, by the meter, uncut | specify | 5 mm   | 511.709  |

|                                                        |         |      |         |
|--------------------------------------------------------|---------|------|---------|
| <b>Replacement feed tubing, FEP ⑦</b>                  |         |      |         |
| For Calibrex™ 525/530 as of 25 mL, cut                 | 350 mm  | 7 mm | 525.350 |
| For Calibrex™ 525/530 as of 25 mL, by the meter, uncut | specify | 7 mm | 525.706 |

|                                        |              |      |           |
|----------------------------------------|--------------|------|-----------|
| <b>Telescopic feed tubing, FEP ⑦</b>   |              |      |           |
| Fits Calibrex™ 520/525/530 up to 10 mL | 150 - 255 mm | 1/pk | 1.525.352 |
| Fits Calibrex™ 525/530 as of 25 mL     | 195 - 345 mm | 1/pk | 1.525.355 |

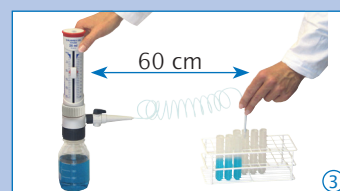
| Description                       | Packaging | Cat. No.  |
|-----------------------------------|-----------|-----------|
| <b>Safety seal sticker</b>        |           |           |
| Fits Calibrex™ 525/530 dispensers | 25/pk     | 1.525.525 |
| Fits Calibrex™ 525/530 dispensers | 100/pk    | 1.525.526 |

### ► Dispenser stability ①

Stand holds dispenser when screwed on small-size bottle.

### ► Remote aspiration ②

Work station facilitates liquid intake from drum or other remote container (<10 m distance, <2 m elevation).



### ► Extension tubing ③

Spiral tubing and delivery Jet-Pen™ help dispense into vessels with maximum comfort within a 60 cm distance. No tool needed to assemble or to remove for cleaning. Autoclavable.



### ► Flow control stopcock ④

Fitting Calibrex™ 525/530 models. No tool needed to assemble or to remove for cleaning. Autoclavable.

### ► Delivery jet ⑤

Extended sizes exchangeable without any tool on Calibrex™ 525/530 models. Autoclavable.



### ► Alternative setting button ⑥

Classical screw-type button easily replaces the original sliding cursor, according to user preference.

### ► Standard and telescopic feed tubings ⑦

Supplied either cut to standard size or uncut, by the meter. Optional telescopic tubing for instant fitting to bottle size.

# Calibrex™ *universal / organo / solutae*

your choice for flexibility and performance

## Chemical resistance chart



| Chemicals A – H                  | Calibrex™ |       |       |
|----------------------------------|-----------|-------|-------|
|                                  | 520       | 525   | 530   |
| Acetaldehyde (Ethanal)           | A         | A     | A     |
| Acetic acid 96%                  | A         | A     | B/2   |
| Acetic acid 100% (Glacial)       | A         | B/4   | B/2/4 |
| Acetone (Propanone)              | B/4       | B/4   | B/4   |
| Acetonitrile (MECN)              | A         | B/4   | B/4   |
| Amino acids                      | A         | C/1   | A     |
| Ammonium hydroxide (amonia)      | A         | B/4   | B/4   |
| Amyl alcohol (Pentanol)          | A         | A     | A     |
| Aniline                          | A         | A     | A     |
| Ascorbic acid                    | A         | C/1   | A     |
| Benzaldehyde                     | A         | A     | A     |
| Benzene                          | B/4       | B/4   | B/4   |
| Boric acid 10%                   | A         | B/1   | A     |
| Bromine                          | B/2       | C/4   | C/2/4 |
| Butanol                          | A         | A     | A     |
| Butanone (MEK)                   | B/4       | B/4   | B/4   |
| Butyl acetate                    | A         | B/4   | B/4   |
| N-Butylamine                     | B/4       | B/4   | B/4   |
| Calcium chloride                 | A         | C/1   | A     |
| Calcium hydroxide                | B/1       | C/1   | B/1   |
| Carbon disulfide                 | A         | B/4   | B/4   |
| Carbon tetrachloride             | A         | B/4   | B/4   |
| Chlorine dioxide                 | B/2/4     | B/4   | B/2/4 |
| Chlorobenzene                    | A         | B/4   | B/4   |
| Chlorobutane                     | A         | B/4   | B/4   |
| Chloroethanol                    | A         | B/4   | B/4   |
| Chloroform                       | B/4       | B/4   | B/4   |
| Chlorosulfuric acid 100%         | B/3       | B/3/4 | B/3/4 |
| Chromic acid 100%                | B/3       | B/3/4 | B/3/4 |
| Citric acid                      | A         | B/1   | A     |
| Cyanoacrylate                    | C/1       | C/1   | C/1   |
| Cyclohexane                      | A         | B/4   | B/4   |
| Cyclohexanone                    | A         | B/4   | B/4   |
| 1,4-Dioxane (Diethylene dioxide) | A         | B/4   | B/4   |
| Dichlorobenzene                  | A         | A     | A     |
| Dichloroethane (DCE)             | B/4       | A     | A     |
| Diesel oil (Heating oil)         | A         | A     | A     |
| Diethylene glycol                | A         | A     | A     |
| Diethylether                     | A         | B/4   | B/4   |
| Dimethyl sulfoxide (DMSO)        | A         | B/1/4 | B/4   |
| Dimethylformamide (DMF)          | B/4       | B/4   | B/4   |
| Ethanol                          | A         | A     | A     |
| Ether                            | B/4       | B/4   | B/4   |
| Ethyl acetate                    | A         | B/4   | B/4   |
| Ethylenediamine                  | A         | A     | A     |
| Ethylene glycol                  | A         | A     | A     |
| Formaldehyde (Formalin)          | A         | A     | A     |
| Formamide                        | A         | A     | A     |
| Formic acid                      | A         | A     | A     |
| Gamma-butyrolactone              | A         | A     | A     |
| Gasoline                         | A         | B/4   | B/4   |
| Glycerin <40%                    | A         | A     | A     |
| Heptane                          | A         | A     | A     |
| Hexane                           | A         | A     | A     |
| Hydrochloric acid 20%            | A         | A     | A     |
| Hydrochloric acid 37% (HCl)      | A         | B/3   | B/3   |
| Hydrofluoric acid (HF)           | C/5       | C/5   | C/5   |
| Hydrogen peroxide                | A         | A     | B/2   |

### Compatibility statement

A = Good resistance – B = Acceptable with limitations – C = Not recommended

### Technical risks

- 1 = Possible crystallization, valve or plunger blockage. Scratches on plunger coating if plunger/barrel dried and stick together.
- 2 = Swell of plunger coating, possible peeling.
- 3 = Release of acid vapours (risk increases with concentration). Do not leave dispenser on bottle.
- 4 = Damage, softening or discoloration of external parts through vapours. Do not leave dispenser on bottle.
- 5 = Chemical degradation of glass parts (plunger/barrel).



| Chemicals I – Z                            | Calibrex™ |       |         |
|--------------------------------------------|-----------|-------|---------|
|                                            | 520       | 525   | 530     |
| Iodine                                     | A         | C/1   | B/1     |
| Iodine bromide / chloride                  | C/2/4     | C/4   | C/2/4   |
| Isooctane                                  | A         | A     | A       |
| Isopropanol                                | A         | A     | A       |
| Isopropylamine                             | A         | B/4   | B/4     |
| Lactic acid                                | A         | C/1   | A       |
| 2-Methoxyethanol                           | A         | A     | A       |
| Methanol                                   | A         | A     | A       |
| Methyl chloride (Chloromethane)            | A         | B/4   | B/4     |
| Methyl methacrylate (MMA)                  | A         | B/4   | B/4     |
| Methyl propyl ketone (2-Pentanone)         | B/4       | A     | A       |
| Methylene chloride (Dichloromethane) (DCM) | B/2/4     | B/4   | B/2/4   |
| Nitric acid 100%                           | B/3       | C/3/4 | C/2/3/4 |
| Nitric acid dil. <30%                      | A         | B/4   | B/4     |
| Nitro-hydrochloric acid (Aqua regia)       | B/3       | B/4   | B/2/4   |
| N-methyl-2-pyrrolidone (NMP)               | A         | A     | A       |
| Octane                                     | A         | A     | A       |
| Octanol                                    | A         | A     | A       |
| Oil, mineral (engine oil)                  | A         | A     | A       |
| Oil, vegetable, animal                     | A         | B/4   | B/4     |
| Oil of turpentine                          | A         | B/4   | B/4     |
| Oxalic acid                                | A         | C/1   | A       |
| Pentane                                    | B/4       | B/4   | B/4     |
| Perchloric acid 100%                       | B/3       | B/4   | B/4     |
| Perchloric acid diluted                    | A         | A     | A       |
| Petroleum                                  | A         | B/4   | B/4     |
| Petroleum ether / spirit                   | A         | B/4   | B/4     |
| Phenol                                     | A         | A     | A       |
| Phenylhydrazine                            | A         | B/1/4 | B/4     |
| Phosphoric acid 85%                        | A         | A     | A       |
| Potassium chloride                         | A         | C/1   | A       |
| Potassium dichromate                       | A         | C/1   | B/1     |
| Potassium hydroxide                        | B/1       | C/1   | A       |
| Potassium iodide                           | A         | C/1   | A       |
| Potassium permanganate                     | A         | C/1   | B/1     |
| Propionic acid (Propanoic acid)            | A         | A     | A       |
| Propylene glycol (Propane-1,2-diol)        | A         | A     | A       |
| Picric acid (Trinitrophenol)               | A         | B/4   | B/4     |
| Pyridine                                   | B/4       | B/4   | B/4     |
| Scintillation fluid                        | A         | A     | A       |
| Silver nitrate                             | B/1       | C/1   | A       |
| Sodium acetate                             | A         | C/1   | A       |
| Sodium chloride (Kitchen salt)             | A         | C/1   | A       |
| Sodium hydroxide 30%                       | B/1       | C/1   | A       |
| Sodium hypochlorite (Javel water)          | A         | C/1   | B/4     |
| Sodium thiosulfate                         | A         | C/1   | A       |
| Sulfonitic acid 100%                       | B/2/3     | B/3/4 | B/2/3/4 |
| Sulfuric acid 98%                          | B/2       | B/4   | B/2/4   |
| Tetrachloroethylene                        | B/4       | B/4   | B/4     |
| Tetrahydrofuran (THF)                      | B/2/4     | B/4   | B/2/4   |
| Toluene                                    | B/4       | B/4   | B/4     |
| Trichlorethylene                           | B/4       | B/4   | B/4     |
| Trichloroacetic acid                       | A         | B/1/4 | B/4     |
| Trichloroethane                            | B/4       | B/4   | B/4     |
| Trichloromethane (Chloroform)              | B/4       | B/4   | B/4     |
| Triethylene glycol                         | A         | A     | A       |
| Trifluoroacetic acid (TFA)                 | B/3       | B/4   | B/4     |
| Xylene                                     | B/4       | B/4   | B/2/4   |

## Model differentiation 520 / 525 / 530



## Ordering information - Instruments

### Calibrex™ universal 520

32 mm base thread. Supplied with 300 mm feed tubing, 80 mm delivery jet with stopper, 28, 40, 45 mm bottle neck adapters, QC certificate and operating instructions.

| Volume<br>mL | Division<br>mL | Cat. No.<br>Fixed volume* | Cat. No.<br>Adj. Volume |
|--------------|----------------|---------------------------|-------------------------|
| 0.25 - 2     | 0.05           | 520.F02                   | 520.002                 |
| 1 - 5        | 0.1            | 520.F05                   | 520.005                 |
| 1 - 10       | 0.25           | 520.F10                   | 520.010                 |

\* Specify desired fixed volume within instrument range when ordering.

### Calibrex™ organo 525

45 mm base thread. Supplied with feed tubing, delivery jet with stopper, bottle neck adapters, QC certificate and operating instructions.

1 and 2.5 mL: 300 mm feed tubing, 90 mm delivery jet, 25, 28 and 32 mm adapters.

5 and 10 mL: 300 mm feed tubing, 90 mm delivery jet, 28, 32 and 40 mm adapters.

As of 25 mL: 350 mm feed tubing, 120 mm delivery jet, 32, 38 and 40 mm adapters.

| Volume<br>mL | Division<br>mL | Cat. No.<br>Without stopcock | Cat. No.<br>With stopcock |
|--------------|----------------|------------------------------|---------------------------|
| 0.1 - 1      | 0.02           | 525.001                      | 525.001FC                 |
| 0.25 - 2.5   | 0.05           | 525.002.5                    | 525.002.5FC               |
| 0.5 - 5      | 0.1            | 525.005                      | 525.005FC                 |
| 1 - 10       | 0.2            | 525.010                      | 525.010FC                 |
| 2.5 - 25     | 0.5            | 525.025                      | 525.025FC                 |
| 5 - 50       | 1.0            | 525.050                      | 525.050FC                 |
| 10 - 100     | 1.0            | 525.100                      | 525.100FC                 |

### Calibrex™ solutae 530

45 mm base thread. Supplied with feed tubing, delivery jet with stopper, bottle neck adapters, QC certificate and operating instructions.

1 and 2.5 mL: 300 mm feed tubing, 90 mm delivery jet, 25, 28 and 32 mm adapters.

5 and 10 mL: 300 mm feed tubing, 90 mm delivery jet, 28, 32 and 40 mm adapters.

As of 25 mL: 350 mm feed tubing, 120 mm delivery jet, 32, 38 and 40 mm adapters.

| Volume<br>mL | Division<br>mL | Cat. No.<br>Without stopcock | Cat. No.<br>With stopcock |
|--------------|----------------|------------------------------|---------------------------|
| 0.1 - 1      | 0.02           | 530.001                      | 530.001FC                 |
| 0.25 - 2.5   | 0.05           | 530.002.5                    | 530.002.5FC               |
| 0.5 - 5      | 0.1            | 530.005                      | 530.005FC                 |
| 1 - 10       | 0.2            | 530.010                      | 530.010FC                 |
| 2.5 - 25     | 0.5            | 530.025                      | 530.025FC                 |
| 5 - 50       | 1.0            | 530.050                      | 530.050FC                 |
| 10 - 100     | 1.0            | 530.100                      | 525.100FC                 |



### ► Bottle-neck adapters

Each Calibrex™ dispenser comes along with three additional PP material bottle neck adapters. To fit additional bottle neck diameter, order the appropriate adapter size or combine two adapters to reach the adequate solution.

| Type                                          | Ext. Ø of<br>bottle neck              | Cat. No.   |
|-----------------------------------------------|---------------------------------------|------------|
| <b>Adapters for Calibrex™ 525/530 ①</b>       |                                       |            |
| Threaded, PP                                  | 32 - 25 mm                            | 1.525.GL25 |
| Threaded, PP                                  | 32 - 28 mm                            | 1.525.GL28 |
| Threaded, PP                                  | 45 - 32 mm                            | 1.525.GL32 |
| Threaded, PP                                  | 45 - 38 mm                            | 1.525.GL38 |
| Threaded, PP                                  | 45 - 40 mm                            | 1.525.GL40 |
| <b>Adapters for Calibrex™ universal 520 ②</b> |                                       |            |
| Threaded, PP                                  | 22, 25, 28, 30, 34, 36, 38, 40, 45 mm | GLP + Ø    |
| Threaded, PTFE                                | 36, 38, 40, 45 mm                     | GLT + Ø    |
| Tapered, PP                                   | 18.8, 24, 29.2, 45 mm                 | NSP + Ø    |
| Tapered, PTFE                                 | 18.8, 24, 29.2 mm                     | NST + Ø    |



# bottle-top dispensers



## Reagent bottles

Glass and polyethylene reagent bottles supplied with its PP screw cap. Suitable for all bottle top dispensers. Corresponding neck adapters supplied with the dispensers.

| Shape                                                         | Volume  | Neck, ext. Ø | Cat. No.   |
|---------------------------------------------------------------|---------|--------------|------------|
| <b>Amber glass<sup>1)</sup> ①</b>                             |         |              |            |
| Square                                                        | 100 mL  | 32 mm        | 314.0100   |
| Square                                                        | 250 mL  | 32 mm        | 314.0250   |
| Square                                                        | 500 mL  | 32 mm        | 314.0500   |
| Square                                                        | 1000 mL | 45 mm        | 314.1000   |
| Round                                                         | 2500 mL | 45 mm        | 314.2500   |
| <b>Amber glass, with handle<sup>1)</sup> ②</b>                |         |              |            |
| Round                                                         | 2500 mL | 45 mm        | 314.2500H  |
| <b>PE coated amber glass<sup>2)</sup> ③</b>                   |         |              |            |
| Square                                                        | 500 mL  | 32 mm        | 314.0500PE |
| Square                                                        | 1000 mL | 45 mm        | 314.1000PE |
| Round                                                         | 2500 mL | 45 mm        | 314.2500PE |
| <b>Clear borosilicate glass<sup>1)</sup> ④</b>                |         |              |            |
| Round                                                         | 250 mL  | 45 mm        | 314.0250C  |
| Round                                                         | 500 mL  | 45 mm        | 314.0500C  |
| Round                                                         | 1000 mL | 45 mm        | 314.1000C  |
| Round                                                         | 2000 mL | 45 mm        | 314.2000C  |
| <b>Clear Pyrex glass, with connection neck<sup>1)</sup> ⑤</b> |         |              |            |
| Round                                                         | 500 mL  | 32 mm        | 314.0500P  |
| <b>Polyethylene<sup>2)</sup> ⑥</b>                            |         |              |            |
| Square                                                        | 250 mL  | 25 mm        | 315.0250   |
| Square                                                        | 500 mL  | 25 mm        | 315.0500   |
| Square                                                        | 1000 mL | 32 mm        | 315.1000   |
| Square                                                        | 2500 mL | 45 mm        | 315.2500   |

<sup>1)</sup> autoclavable, <sup>2)</sup> not autoclavable



Your local distributor

## Safety first

Refer to package inserts for safety precautions, operating instructions and warranty terms.

Mind risks involved in handling hazardous liquids with respect to personal, third party and environmental protection and safety.

## QC and warranty

The Calibrex™ line is manufactured and tested to fully comply with current regulations. Each instrument bears its own serial number and passes strict performance control attested by an individual QC certificate. Products and specifications are subject to change without prior notice.



## US Patent pending

[www.socorex.com/patents-en.html](http://www.socorex.com/patents-en.html)



Accredited  
calibration  
laboratory  
ISO / IEC 17025

**Q.M. SYSTEM**  
**ISO 9001/13485**  
**CERTIFIED**



**SOCOREX**  
SWISS

# Chemical resistance of Socorex<sup>®</sup> dispensers Calibrex<sup>™</sup> models 520 / 521 Acurex<sup>™</sup> models 501

Bottle-top dispensers are used daily for dispensing a wide range of chemicals. Therefore, instruments have to meet various requirements assuring safety of the laboratory staff and their work. Dispensers must not give off any substances which may interfere with trace analysis, have cytotoxic properties, distort optical tests or influence chromatographic methods and residue analysis.

## Materials

Special attention was paid to component materials (see charts below). All parts of the Acurex<sup>™</sup> and Calibrex<sup>™</sup> dispensers in contact with the liquid are made of robust and chemically inert materials providing for long instrument life.

| Parts                  | Acurex <sup>™</sup> 501           |
|------------------------|-----------------------------------|
| Valve                  | Pyrex glass and synthetic ruby    |
| Barrel                 | Neutral glass                     |
| Plunger                | PTFE coated glass                 |
| Reservoir              | Amber glass or borosilicate glass |
| Delivery jet and union | PTFE / ETFE / PFA                 |

| Parts                 | Calibrex <sup>™</sup> 520 | Calibrex <sup>™</sup> 521 |
|-----------------------|---------------------------|---------------------------|
| Feed tube             | PTFE                      |                           |
| Intake valve          | Ceramic                   | Borosilicate glass        |
| Valve balls           | Pyrex glass               | Ceramic, ruby             |
| Valve springs         | Platinum-Iridium          |                           |
| Barrel                | Borosilicate glass        |                           |
| Barrel plate          | PTFE                      | - -                       |
| Plunger               | PFA coated glass          |                           |
| Outlet valve          | Ceramic                   |                           |
| Body                  | ETFE                      |                           |
| Delivery jet assembly | PTFE/ETFE                 |                           |

## Chemicals from A to Z

The following list includes most currently used chemicals. It provides useful information for the safe and adequate use of Acurex<sup>™</sup> 501 and Calibrex<sup>™</sup> 520/521 dispensers. However, safety precautions and recommendations in operating instructions must be followed carefully.

## Code explanations

- A = Good resistance
- B = Acceptable with limitations
- C = Not recommended

- 1 = Possible crystallisation - blockage (do not let dry plunger/barrel together).
- 2 = Swell of plunger protection layer, possible peeling.
- 3 = Acid vapours (better resistance with lower concentration). Do not leave instrument on bottle.
- 4 = Risk of softening or discoloration of external parts through vapours. Do not leave instrument on bottle.
- 5 = Chemical degradation of glass parts (plunger/barrel).

| Chemicals A - Z                 | Acurex 501 | Calibrex 520 | Calibrex 521 |
|---------------------------------|------------|--------------|--------------|
| <b>A</b>                        |            |              |              |
| Acetic acid 100%                | A          | A            | B/1          |
| Acetic anhydride                | B/4        | B/4          | B/4          |
| Acetone                         | A          | B/4          | A            |
| Acetonitrile                    | A          | A            | A            |
| Ammonium hydroxide              | A          | A            | B/4          |
| Ammonium molybdate              | A          | A            | A            |
| Aniline                         | A          | A            | B/4          |
| Antimony trichloride            | B/2        | A            | A            |
| Ascorbic acid                   | A          | A            | A            |
| <b>B</b>                        |            |              |              |
| Benzaldehyde                    | A          | A            | A            |
| Benzene                         | A          | B/4          | B/4          |
| Bis-(2-ethylhexyl) phthalate    | A          | B/4          | B/4          |
| Boric acid                      | A          | A            | A            |
| Bromine                         | B/2        | B/2          | C/2/4        |
| Butanol                         | A          | A            | A            |
| Butanone                        | A          | C/4          | A            |
| Butyl acetate                   | A          | A            | B/4          |
| Butyl acrylate                  | A          | A            | A            |
| <b>C</b>                        |            |              |              |
| Calcium chloride                | B/1        | A            | A            |
| Carbon disulfide                | A          | A            | A            |
| Carbon tetrachloride            | A          | A            | B/4          |
| Chlorine water                  | C/2/4      | B/2/4        | C/2/4        |
| Chlorobenzene                   | A          | A            | A            |
| Chlorobutane                    | A          | A            | A            |
| Chloroethanol                   | A          | A            | A            |
| Chloroform / Trichloroethane    | C/4        | B/4          | B/4          |
| Chloronitric acid 100%          | B/2/3      | B/3          | C/3          |
| Chlorosulphuric acid 100%       | B/2/3      | B/3          | B/3          |
| Chromic acid 100%               | B/2/3      | B/3          | B/3          |
| Citric acid                     | A          | A            | A            |
| Copper fluoride                 | A          | A            | B/4          |
| Cyanocrylate                    | C/1        | C/1          | C/1          |
| Cyclohexane                     | A          | A            | A            |
| Cyclohexanone                   | A          | A            | A            |
| <b>D</b>                        |            |              |              |
| Di (2-ethylhexyl) peroxydicarb. | B/1        | B/4          | B/4          |
| Dichlorethane (DCE)             | B/4        | B/4          | A            |
| Dichloromethane (DCM)           | B/4        | B/2/4        | B/2/4        |
| Diethylene glycol               | A          | A            | A            |
| Diethylether                    | A          | A            | A            |
| Dimethylformamide (DMF)         | A          | B/4          | A            |
| Dimethylsulfoxide (DMSO)        | A          | A            | A            |
| Dioxane /Diethylene dioxide     | A          | A            | B/4          |
| Dioxide chlorine                | B/2/4      | B/2/4        | B/2/4        |



| Chemicals A - Z                   | Acurex 501 | Calibrex 520 | Calibrex 521 |
|-----------------------------------|------------|--------------|--------------|
| <b>E</b>                          |            |              |              |
| Essential oils                    | B/1        | B/1          | B/1          |
| Ethanol                           | A          | A            | A            |
| Ether                             | A          | B/4          | B/4          |
| Ethyl acetate                     | A          | A            | B/4          |
| Ethylene diamine                  | A          | A            | A            |
| Ethylene glycol                   | A          | A            | A            |
| <b>F</b>                          |            |              |              |
| Formaldehyde (Formalin)           | A          | A            | A            |
| Formic acid                       | A          | A            | A            |
| <b>G</b>                          |            |              |              |
| Gamma-butyrolactone               | A          | A            | A            |
| Gazoline                          | A          | A            | A            |
| Glycerin <40%                     | A          | A            | A            |
| <b>H</b>                          |            |              |              |
| Heptane                           | A          | A            | A            |
| Hexane                            | A          | A            | A            |
| Hydrofluoric acid (HF)            | C/5        | C/5          | C/5          |
| Hydrochloric acid <20% (HCL)      | B/3        | A            | B/4          |
| Hydrochloric acid 20 to 37% (HCL) | B/2/3      | B/2/3        | B/2/4        |
| Hydrogen peroxide                 | A          | A            | A            |
| <b>I</b>                          |            |              |              |
| Iod (J2)/ Iodine                  | A          | A            | A            |
| Iodine Bromide                    | C/2/4      | C/2/4        | C/2/4        |
| Iodine Chloride                   | C/2/4      | C/2/4        | C/2/4        |
| Isooctane                         | A          | A            | A            |
| Isopropanol                       | A          | A            | A            |
| Iso-propylamide                   | A          | A            | A            |
| <b>L</b>                          |            |              |              |
| Lactic acid                       | A          | A            | A            |
| Liquid ammonia                    | A          | A            | A            |
| <b>M</b>                          |            |              |              |
| Methanol                          | A          | A            | A            |
| Methyl chloride                   | B/4        | B/4          | B/4          |
| 2-Methoxyethanol                  | A          | A            | A            |
| Methyl ethyl ketone (MEK)         | A          | B/4          | A            |
| Methylene chloride (DCM)          | A          | B/2/4        | B/2/4        |
| Methyliodide                      | A          | A            | A            |
| Methylmethacrylate (MMA)          | A          | A            | A            |
| Methylpentanone                   | B/4        | B/4          | B/4          |
| <b>N</b>                          |            |              |              |
| N-Butylamin                       | B/4        | B/4          | B/4          |
| Nitric acid >70%                  | B/2/3      | C/2/3/4      | C/2/3        |
| Nitric acid 30 to 70%             | B/2/3      | B/2/3        | B/2/3        |
| Nitric acid <30%                  | A          | A            | A            |
| Nitro-hydrochloric acid           | B/2/3      | B/3          | C/3          |
| Nitromethane                      | A          | B/4          | B/4          |
| N-methyl-pyrrolidone (NMP)        | A          | A            | A            |

| Chemicals A - Z                  | Acurex 501 | Calibrex 520 | Calibrex 521 |
|----------------------------------|------------|--------------|--------------|
| <b>O</b>                         |            |              |              |
| Octane                           | A          | A            | A            |
| Octanol                          | A          | A            | A            |
| Oil (vegetable, mineral, animal) | A          | A            | A            |
| Oxalic acid                      | A          | A            | A            |
| <b>P</b>                         |            |              |              |
| Pentane                          | B/4        | B/4          | B/4          |
| Perchloric acid 100%             | B/2/3      | B/3          | B/3          |
| Perchloric acid diluted          | A          | A            | A            |
| Petrol benzene                   | A          | A            | B/4          |
| Petroleum ether / spirit         | A          | A            | B/4          |
| Phenol                           | A          | A            | A            |
| Phenylhydrazine                  | A          | A            | B/4          |
| Phosphine                        | A          | A            | A            |
| Phosphoric acid 100%             | A          | A            | A            |
| Potassium chloride               | B/1        | A            | A            |
| Potassium dichromate             | A          | A            | A            |
| Potassium fluoride               | C/4/5      | C/4/5        | C/4/5        |
| Potassium hydroxide              | B/1        | B/1          | B/1          |
| Potassium iodide                 | A          | A            | A            |
| Potassium permanganate           | A          | A            | A            |
| Propionic acid                   | A          | A            | A            |
| Propylene oxide                  | A          | A            | A            |
| Pyric acid (Trinitrophenol)      | A          | A            | B/4          |
| Pyridine                         | B/4        | B/4          | B/4          |
| <b>R</b>                         |            |              |              |
| Resorcin                         | B/4        | B/4          | B/4          |
| <b>S</b>                         |            |              |              |
| Silver nitrate                   | A          | B/1          | B/1          |
| Sodium acetate                   | A          | A            | A            |
| Sodium chloride/salt for cooking | B/1        | A            | A            |
| Sodium hydroxide                 | B/1        | B/1          | B/1          |
| Sodium hypochloride              | A          | A            | A            |
| Sodium thiosulfate               | A          | A            | A            |
| Sulfochromic acid 100%           | B/2/3      | B/2/3        | B/2/3        |
| Sulfonitric acid 100%            | B/2/3      | B/2/3        | B/2/3        |
| Sulfur dioxide                   | B/4        | B/4          | B/4          |
| Sulfuric acid < 60%              | B/3        | A            | B/4          |
| Sulfuric acid >= 60%             | B/2/3      | B/2/3        | B/2/4        |
| <b>T</b>                         |            |              |              |
| Terebentine oil                  | A          | A            | B/4          |
| Tetrachloroethane                | C/4        | B/4          | B/4          |
| Tetrachloroethylene/methylene    | B/4        | B/4          | B/4          |
| Tetrahydrofurane THF             | B/2/4      | B/2/4        | B/2/4        |
| Tetramin                         | A          | A            | A            |
| TKD Digest                       | B/1/3      | B/1/2        | B/1/2        |
| Toluene                          | A          | B/4          | B/4          |
| Trichlorethylene                 | B/4        | B/4          | B/4          |
| Trichloroacetic acid             | A          | A            | A            |

| Chemicals A - Z                  | Acurex<br>501 | Calibrex<br>520 | Calibrex<br>521 |
|----------------------------------|---------------|-----------------|-----------------|
| <b>T (continued)</b>             |               |                 |                 |
| Trichloroethane/methane          | B/4           | B/4             | B/4             |
| 1,1,2 - Trichlorotrifluoroethane | B/4           | B/4             | B/4             |
| Trifluoroacetic anhydride (TFAA) | B/3           | B/3             | B/4             |
| Trifluoroacetic acid (TFA)       | B/3           | B/3             | B/4             |
| <b>X</b>                         |               |                 |                 |
| Xylene                           | A             | B/4             | B/4             |

The above guidelines have been carefully reviewed prior to publication. Should you require information on chemicals not listed, please feel free to contact us.



# WolfLabs

**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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