Buffers and standards for pH, conductivity and oxygen

High quality calibration solutions





Introduction

In our German production facility in Waldheim (Saxonia), we produce high quality buffers and standards for the reliable calibration and adjustment of

- pH sensors
- ORP sensors
- Conductivity sensors
- Oxygen sensors





pH buffer solutions

Product root: CPY20





Your benefits with CPY20 pH buffers



Highly precise pH buffers for all industries

- The high accuracy and reproducibility of the buffers help you to optimize the pH value in your process and to maximize the yield and quality of your product.
- CPY20 pH buffers are traceable to standard reference material of NIST (USA) and PTB (Germany) and fulfil the stringent documentation requirements of Life Sciences.
- All used preservatives are FDA-listed for highest product safety in FDA-supervised processes.
- All temperature curves of CPY20 pH buffers are pre-programmed in all transmitters of the Liquiline series to simplify sensor calibration and adjustment and reduce your maintenance effort.
- The easily accessible, identical certificates of all CPY20 pH buffers simplify your audit trails and **improve the reliability of your SOPs**.

Overview: CPY20 pH buffers

| Buffer Feature | pH 2.00 | pH 4.00 | pH 7.00 | pH 9.00 | pH 9.22 | pH 10.00 | pH 12.00 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Bottle size: 18 ml | | CPY20-C01D1 | CPY20-E01D1 | | | | |
| Bottle size: 250 ml | CPY20-A02D1 | CPY20-C02D1 | CPY20-E02D1 | CPY20-G02D1 | CPY20-I02D1 | CPY20-K02D1 | CPY20-M02D1 |
| Bottle size: 1000 ml | CPY20-A10D1 | CPY20-C10D1 | CPY20-E10D1 | CPY20-G10D1 | CPY20-I10D1 | CPY20-K10D1 | CPY20-M10D1 |
| Bottle size: 5000 ml | CPY20-A50D1 | CPY20-C50D1 | CPY20-E50D1 | CPY20-G50D1 | CPY20-I50D1 | CPY20-K50D1 | CPY20-M50D1 |
| Accuracy | ±0.02 pH | ±0.05 pH | ±0.05 pH |
| BSE/TSE free (certificate avail.) | V | V | V | V | V | V | V |
| Traceable to NIST and PTB | V | V | V | V | V | V | V |
| All preservatives are FDA-listed | V | V | V | V | V | V | V |
| Colored for easy identification | | red | green | | blue | | |

The 18 ml bottles contain the same high quality buffers as the other bottles, but are not certified, because they are bottled externally.



ORP buffer solutions

Product root: CPY3





Your benefits with CPY3 ORP buffers



Reliable ORP buffers for all industries

- Maintain your process safety: CPY3 buffers allow the reliable, reproducible adjustment of your measuring point to keep the ORP value in the required range.
- Speed up your maintenance: the buffers are instantly ready to use
 just insert the sensor!
- **Easy handling:** The buffers are color-coded for fast and secure identification.



Overview: CPY3 ORP buffers

| Buffer Feature | 220 mV | 468 mV |
|---------------------------------------------------------|--------|--------|
| Bottle size: 250 ml | СРҮЗ-4 | CPY3-5 |
| Bottle size: 5000 ml | СРҮЗ-А | СРҮЗ-В |
| Accuracy | ±5 mV | ±5 mV |
| Temperature behavior printed on the label of the bottle | ~ | V |
| Colored for easy identification | yellow | brown |



- There is worldwide no ORP standard reference material available, hence, certification about traceability is not possible.
- A manufacturer declaration with detailed production description is available on request.
- Do not mix the ORP buffer solutions! That would cause a chemical reaction with a deep blue precipitation.

Standards for conductivity, oxygen and ISE sensors

CLY11 calibration standards for conductivity sensors COY8 zero-point gel for oxygen sensors





Your benefits with CLY11 conductivity standards



Highly precise standards for reliable validation of your conductivity measuring points

- The high accuracy of CLY11 ensures the reliable validation of your conductivity sensors and, thus, the quality and safety of your product.
- CLY11 solutions come with a quality certificate and are traceable to standard reference material of NIST and **fulfil all documentation** requirements.
- The great band width of available standards with different conductivity values meet the required measurement range of all your sensors in the field and in the lab to simplify your maintenance.



Your benefits with COY8 zero-point gel



100% oxygen-free medium for validation, calibration and adjustment of oxygen measuring points

- Be sure: exact determination of the true zero point of your oxygen and chlorine measuring loops.
- Enhance your product quality: the zero-point calibration improves the accuracy and reliability of your measurements and can increase the quality and yield of your products.
- Speed up your maintenance: the gel is instantly ready to use just insert the sensor!
- **Simplify your maintenance:** one tool for validation, calibration and adjustment of all your sensors in the field and the lab.
- Improve safety at work: the ready-made gel comes in safe, easy-touse bottles removing the need for manual chemical preparation by plant personnel.

Conductivity and oxygen buffers

| Parameter | Order code | Value | Bottle sizes in ml |
|--------------|------------|------------|--------------------|
| Conductivity | CLY11-A | 74.0 µS | 500 |
| Conductivity | CLY11-B | 149.6 µS | 500 |
| Conductivity | CLY11-C | 1.406 mS | 500 |
| Conductivity | CLY11-D | 12.64 mS | 500 |
| Conductivity | CLY11-E | 107.0 mS | 500 |
| Oxygen | COY8-AAA01 | Zero point | 25 |



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