

For Applications In Emulsions and Dispersed Samples

Introduction

In certain challenging applications such as polymeric dispersions, it is advantageous to use an electrode with SteadyForce® reference system. Since this system is under over-pressure, outflow of electrolyte is optimum even in difficult emulsions and slurry samples. It has an advantage of preventing the sample from getting into the electrode. It guarantees fast and highest reproducibility of pH measurements since the electrolyte flow is always maintained, even in challenging samples.

Highlights



SteadyForce® reference system ensures electrolyte flow even in highly dispersed samples.



Maintenance-Free Sensor that requires no refilling and is always ready for use.



Ensures data security and easy handling. The last 5 calibrations, and the factory calibration are saved on the chip.



Highly robust glass particularly resistant to harsh chemicals, suitable for high temperatures (up to 130°C).

- ✓ pH
- ✓ Ref
- ✓ °C
- ✓ ISM



Typical applications and samples



Corrosive Chemicals and Galvanic baths

Its highly robust glass mostly suitable for corrosive acid and base samples and allows for accurate and fast pH measurement.



Hot sample (> 100 °C)

It is ideal for hot samples such as hot milk and cream, due to its A41 glass membrane which is suitable for high temperatures.



Plastic industries

The SteadyForce™ reference system guarantees highest reproducibility of pH measurements in samples like polymeric dispersions used in the production of plastics.

Tips and tricks for optimal use and care



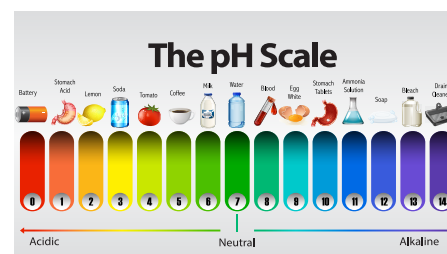
Ensure accurate measurement with regular calibrations

Calibrate the sensor before use with fresh and non-expired buffers bracketing the pH of the sample. Our sachets guarantee fresh solution for every calibration.



Keep your sensor up to speed

Clean the sensor with DI water after each measurement, store it between measurements in InLab Storage Solution and periodically recondition it in 0.1M HCl to ensure fast response.



Prolong the life of your sensor

The pH range for this sensor is 0 to 12 pH units. The sensor has a usable life till electrolyte level drops below pressure. Make sure to change the electrode after its usable life.

Specifications

Order number	51344211
Dimensions	Please see the drawing on the first page.
pH range	0 - 12
Temperature range	0 - 130°C
Shaft material	Glass
Membrane glass	A41 - Highly robust glass particularly resistant to harsh chemicals, suitable for high temperatures.
Reference system	SteadyForce™ reference system - pressurized (3bar) electrolyte ensuring electrolyte flow.
Reference junction	Ceramic junction
Reference electrolyte	DPA-Gel electrolyte for electrodes with SteadyForce™.
Connection	MultiPin™ allowing connections of various cables
Recommended cable	30281896 - InLab cable MultiPin-BNC/RCA 1.2m

Mettler-Toledo GmbH, Analytical

Hewinkelstrasse 3
8606 Nänikon, Switzerland
Tel. +41 44 944 47 47

Subject to technical changes
© 07/2020 METTLER TOLEDO. All rights reserved
30619654
Group MarCom RITM648712 PB/AG

www.mt.com/pH

For more information