

# Cosmetics pH Meter PCE-228P



## PCE-228P-ICA pH Meter

**For cosmetics, large, easy-to-read display /SD card memory (1 ... 16 GB), stored data is saved as an Excel file / RS-232 interface and optional software for direct transfer to the PC**

The main purpose of cosmetics production is not only to make good-smelling products with good-sounding names and lists of beneficial ingredients, but to make them efficient so that these products really improve the condition of the skin or hair and in no way damage them.

The pH measurement in cosmetics is a priority test that should be performed not only to ensure that the pH of the product matches the pH of the skin, but also to ensure good quality, suitable viscosity, color / odor and to ensure durability of the cosmetics.

A too acidic or too alkaline medium in shampoo can, for example, lead to a disorder and cause scalp problems. Therefore, the pH value in cosmetics is strictly and continuously monitored and not only in the final product. It is important to understand that monitoring is required at all stages: first in the raw materials and all the ingredients, then during the production process and finally in the finished shampoo application, gel / dye / foam that are on the shelves of the supermarkets. Here, it is necessary to fulfill the requirements and regulations of health organizations and GMP principles.

Many of us have experienced at least once that after a short while the pleasant smell of the foam worsens, even though in the beginning everything was fine. This is proof that the manufacturer made mistakes during the production process and perhaps did not pay enough attention to measuring and correcting the pH. The cosmetic product should not only be perfect on the day of its manufacture and meet the standard, it should also have a very good stability. Today, many hair and facial products are presented as "BIO". Manufacturers of such products need to remember that making such a product is much harder. The natural ingredients that make the product "BIO" can be quite capricious.

When talking about standard cosmetic products (both hair and skin), the ideal pH is between 4.5 ... 5.5. Depending on the skin type for which the product is intended, and also on the function of the product (refers to chemical substances, hair dyes, strong hair and body sprays), the values may be lower and higher.

The use of a pH meter with a special glass electrode is one of the well-known methods of pH measurement in cosmetics. The pH meter ensures that you get reliable results when taking measurements in shampoo, liquid cleansing toners and foams, gels and many other substances (containing water).

pH meters used for cosmetics are often portable, very easy to use, light in weight and easy to handle. The glass electrode is perfect on the one hand because it is always easy to keep clean, but on the other hand a glass electrode requires careful handling because of its fragility. Modern electrodes receive special protection, such as "a coat" around them, which makes them very sturdy.

The application of the pH electrode requires attention and careful adjustment. It is necessary to follow all rules regarding the application, cleaning and maintenance of this sensitive instrument. Although the pH tests are carried out on the additives or finished product of the shampoo, it is imperative to maintain the required ambient temperature, as their deviation can lead to erroneous measurements.

The pH and maintenance of the efficacy of cosmetics is one of the reasons why such products should be stored at certain temperatures. Some of them should not be refrigerated or exposed to direct sunlight and excessively warm temperatures.

Subject to change

- ▶ Optimum price / performance ratio
- ▶ SD card memory (1 ... 16 GB) - the stored data are saved directly as an Excel file on the SD card (no software needed for evaluation)
- ▶ RS-232 interface for online Data Transfer
- ▶ Measures pH, ORP & pH. Temperature
- ▶ High accuracy
- ▶ Large LCD display
- ▶ Robust housing
- ▶ Incl. Special pH electrode IJ-44C
- ▶ Automatic calibration
- ▶ Manual or automatic temperature compensation
- ▶ BNC connector
- ▶ Suitable for laboratory and on-site pH measurement
- ▶ Additional REDOX electrode
- ▶ Adjustable measuring rate
- ▶ Easy to operate

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# Specifications

<b>Measuring range pH</b>	0.00 ... 14.00 pH
Resolution	0.01 pH
Accuracy	± (0.02 pH + 2d)
<b>Measuring range redox</b>	-1999 ... 0 ... 1999 mV (only possible with optional REDOX electrode)
Resolution	1 mV
Accuracy	± (0.5% + 2d)
<b>Measuring range temperature</b>	0 ... 65°C / 32 ... 149°F (only temp. Sensor)
Resolution	0.1°C / 0.18°F
Accuracy (@ 20°C)	± 0.5°C / 0.9°F
Calibration	Automatic three-point calibration
Temperature Compensation	Automatically from 0 ... 65°C / 32 ... 149°F or manually between 0 ... 100°C / 32 ... 212°F with the temperature sensor removed
Electrode	Special pH electrode IJ-44C
Temperature range	0 ... 60°C / 32 ... 140°F
Measuring rate	Adjustable from 1 second to 8 hours 59 minutes 59 seconds
Display	LC display 52 x 38 mm / 2 x 1.5 in
Data storage	Flexible via SD card memory 1 ... 16 GB
Interface	RS-232
Software	Optional
Power supply	6 x 1.5V AA batteries / 9V power adapter (optional)
Environmental conditions	0 ... 50°C / 32 ... 122°F max. 85% rh
Dimensions	177 x 68 x 45 mm / 7 x 2.7 x 1.8 in
Weight	490 g / 1.1 lbs

# More information

Manual



More product info



Similar products



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