LabSen 243-6 Semi-Micro pH/Temperature Electrode
User Manual

LabSen electrochemical sensors are premium pH electrodes with manufacturing technology and key components imported from Switzerland. LabSen 243-6 semi-micro pH electrode is designed for testing the pH level of semi-micro samples (≥0.2ml) in small containers, such as tubes and vials.

This probe has the following features:

- Special LabSen semi-micro cylindrical sensor tip, suitable for small-volume pH measurement
- Blue gel inner solution, does not flow and will not cause a bubble.
- Long life reference system, has better stability and service life.
- Built-in temperature sensor

1. Technical Data

Measuring Range	(0-14) pH	Electrolyte	3M KCL
Temperature Range	(0~100) ℃	Soaking Solution	3M KCL
Shaft Material	Lead-free Glass	Electrode Dimension	Electrode (Φ12×148) mm Measuring Tip (Φ6×100) mm
Reference	Long Life	Connector	BNC/RCA
Junction	Ceramic	Cable	Φ3×1m

2. Usage and Maintenance

2.1 Prior to measurement, unplug the rubber plug on the refilling hole to maintain pressure of the reference solution, keeping consistent flow rate of reference solution and stable potentials of junction.

2.2 After a period of usage, the reference solution will run low. Whenever the level falls to 1/2 height of the electrode, add 3M KCL solution to the refilling hole by using syringe or pipette.

2.3 The connector of the electrode should be kept clean and dry. If contaminated, please clean it with medical cotton and absolute alcohol and blow dry to prevent the short circuit of the electrode and slow reaction of electrode.

2.4 The electrode's measuring tip should be soaked in the soaking bottle containing storage solution to keep the membrane hydrated and junction unblocked. When measuring, please unscrew the bottle cap, pull out the electrode and rinse it with deionized or distilled water. After using, please put the electrode back into the bottle and screw tight the cap. Clean the bottle and replace the storage solution if the storage solution gets turbid and mildewed. The electrode should never be soaked in pure water or buffer solution for long.

2.5 Please avoid measuring dehydrated medium like strong acid or strong alkaline solution, absolute ethyl alcohol and concentrated sulfuric acid. In case of measuring such solution, please try to reduce the immersion time and clean it carefully after use.

2.6 There is a temperature sensor built inside the pH electrode to enable automatic temperature compensation function.

2.7 After 1-year of use, we recommend replacing the electrode to ensure the best accuracy.

Limited Warranty

We warrant this electrode to be free from defects in material and workmanship and agrees to repair or replace free of charge, at option of APERA INSTRUMENTS, LLC, any malfunctioned or damaged product attributable to responsibility of APERA INSTRUMENTS, LLC for a period of **six months.** Warranty period is the time limit to provide free service for the products purchased by customers, not the service life of the tester or electrodes.

This limited warranty does not cover any damages due to:

i. transportation;

ii. storage;

iii. improper use;

iv. failure to follow the product instructions or to perform any preventive maintenance;

v. modifications;

vi. combination or use with any products, materials, processes, systems or other matter not provided or authorized in writing by us;

vii. unauthorized repair;

viii. normal wear and tear; or

ix. external causes such as accidents, abuse, or other actions or events beyond our reasonable control.

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