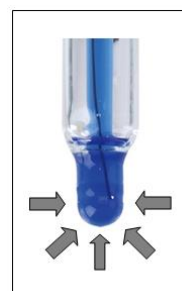


## LabSen® 841 Strong Base pH Electrode User Manual

LabSen® electrochemical sensors are premium pH electrodes backed by proprietary sensor technologies and components from Switzerland. LabSen 841® pH Electrode adopts a special H glass membrane, ideal for strong base solutions, and solutions with high temperature.

This probe has following features:

- Impact-resistant membrane (see the right picture), there is no danger of electrode breakage during normal use.
- Tested in high temperature and strong base conditions, the service life of the probe is 5 times longer than normal electrodes (test condition: 60°C, 1M NaOH solution).
- Blue gel inner solution, does not flow and will not cause a bubble.
- Silver ion trap reference prevents the contamination of the junction when testing samples containing sulfides and proteins.



### 1. Technical Data

Measuring Range	( 2-14 ) pH	Electrolyte	3M KCL
Temperature Range	( 0~100 ) °C	Soaking Solution	3M KCL
Shaft Material	Lead-free Glass	Electrode Dimension	( Φ12×120 ) mm
Membrane Shape	Cylindrical	Connector	BNC
Reference	Silver Ion Trap	Cable	Φ3×1m
Junction	Ceramic		

### 2. Usage and Maintenance

#### 2.1 Measurement suggestions:

- (a) The electrode can measure strong base solutions lighter than 1mol/L (pH=14), with good repeatability and stability. Stirring is recommended while measuring to speed up stabilization.
- (b) Rinse the probe with deionized or distilled water after each measurement and store it in 3M KCL solution.
- (c) The performance of the electrode will be reduced if it measures strong base solution frequently. Users may use 1% HF solution (about 0.5mol/L) to soak the probe for 5-8 seconds, then soak in 3M KCL solution for more than 2 hours, and then rinse with deionized or distilled water to recondition the probe.

2.2 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.

2.3 The electrode's measuring tip should be soaked in the soaking bottle containing 3M KCL soaking 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 purified water or buffer solution for long.

### **3. Limited Warranty**

We warrant this electrode to be free from defects in material and workmanship and agree 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 from the delivery.

This limited warranty does not cover any damages due to:

Transportation, storage, improper use, failure to follow the product instructions or to perform any preventive maintenance, modifications, combination or use with any products, materials, processes, systems or other matter not provided or authorized in writing by us, unauthorized repair, normal wear and tear, or external causes such as accidents, abuse, or other actions or events beyond our reasonable control.

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