

# SALINTEST

HI98203

Salinity Concentration  
Pocket-sized Meter

## GENERAL INFORMATION:

The SALINTEST utilizes a sodium ion-selective glass electrode to determine the activity of sodium ions in solution.

When dissolved, NaCl ionizes to form Na<sup>+</sup> and Cl<sup>-</sup> ions.

Measurement of concentration of the Na<sup>+</sup> ions is an indicator of the concentration of NaCl.

The relationship between the SALINTEST reading and the g/L NaCl scale is shown in the logarithmic chart below.

A double junction reference is used to ensure a highly stable reading.

If you suspect that the calibration has drifted, you can recalibrate by using HI7081 or a solution of known concentration (adjust the reading with the calibration trimmer).

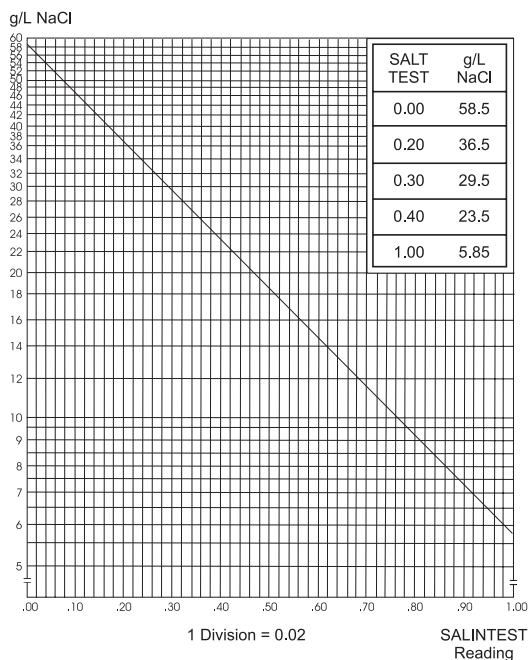
## HOW TO USE THE CHART:

- Locate the pNa reading on the horizontal axis of the chart.
- Move vertically upwards to intersect with the 45° line.
- Move horizontally and read the g/L NaCl value.

E.g. Display = 0.42  
g/L NaCl = 22

## OPERATION:

- Remove the protective cap and turn the meter on with the ON/OFF switch located on the top.
- Immerse it into solution to be tested without exceeding the maximum immersion level.
- Stir gently and wait for the reading to stabilize.
- Read the value on display and use the chart to convert the reading to g/L NaCl.
- After use, switch the meter off and rinse the electrode with water to minimize contamination. Always replace the protective cap after use.
- Large differences in pNa readings ( $\pm 0.1$ ) could be due to a dry electrode or lack in calibration.
- To improve performance, leave the meter in HI7081 solution for a few minutes at least once a week.



**HANNA**  
instruments

Manufacturers since 1978

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#### SPECIFICATIONS:

RANGE	0.00 to 1.00 pNaCl (58.4 to 5.84 g/L NaCl)
RESOLUTION	0.01 pNaCl
ACCURACY (@20°C/68°F)	±0.02 pNaCl
TYPICAL EMC DEVIATION	±0.04 pNaCl
ENVIRONMENT	0 to 50°C (32 to 122°F); 95% RH
BATTERY TYPE	4 x 1.5V alkaline (included)
BATTERY LIFE	approx. 500 hours of continuous use
DIMENSIONS	175x41x23 mm (7.9x1.8x1")
WEIGHT	78 g (2.7 oz.)

#### ACCESSORIES:

HI 7081L	30 g/L NaCl solution (460 mL bottle)
HI 7081M	30 g/L NaCl solution (230 mL bottle)
HI 7061M	Electrode cleaning solution (230 mL bottle)
HI 73202	Spare electrode
HI 731326	Calibration screwdriver (20 pcs)

#### ONE YEAR WARRANTY AND SERVICEABLE:

Covered by **one year** warranty against defects in workmanship and materials, this tester is now completely serviceable. Contact your dealer for further information.

The **SALINTEST** is in compliance with the CE directives.



Visit our Internet Home Page:  
<http://www.hannainst.com>

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#### CALIBRATION:

- Immerse the tester in HI7081 (30 g/L NaCl) calibration solution, without exceeding the maximum immersion level.
- Allow the reading to stabilize and with a small screwdriver turn the calibration trimmer until the display shows "0.30".



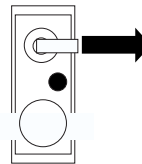
Calibration is now complete.

#### MAINTENANCE:

In case of erroneous reading even after an accurate calibration, the reference junction can be contaminated or clogged.

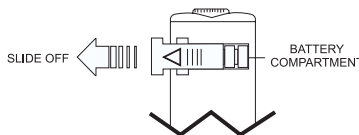
Pull out 2 mm (1/8") of the cloth junction to renew the electrode reference (it is recommended to cut the cloth leaving always at least 2 mm - 1/8" over the reference compartment) and repeat the calibration procedure.

The cloth junction can be pulled out approximately 20 times. After that, the electrode can be replaced (see the Electrode Replacement section).



#### BATTERY REPLACEMENT:

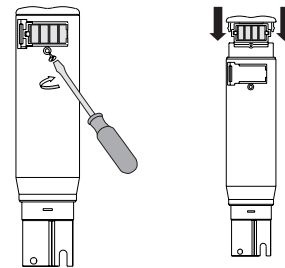
If display fades or the **SALINTEST** switches off, the batteries must be replaced. Slide off the battery compartment cover and replace all four 1.5V batteries while paying attention to their polarity.



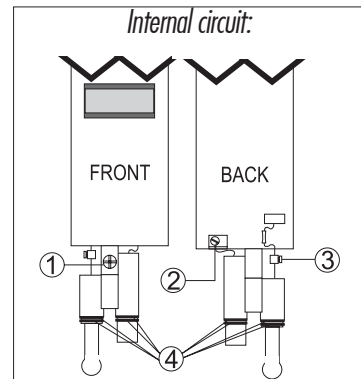
#### ELECTRODE REPLACEMENT:

The electrode can be easily replaced in the following way:

- Slide off the battery cover.
- Remove the screw on the back of the **SALINTEST** located below the battery compartment and slide off the whole internal part of the tester.



- Remove the fastening screw on the front (1) to loose the electrode. The internal circuit is connected to the electrode trough two wires (one for the glass sensor and one for the reference). Remove the two small screws (2 & 3) which fasten the two connecting wires to their sockets.



- Remove the electrode and replace it with a new HI73202.
- Fasten first the screw on the front (1) to attach the electrode to the circuit. Insert the two small wires into their sockets and fasten the two screws (2 & 3).
- The new electrode is supplied with four O-rings (4). Make sure they are placed properly before reinserting the circuit into the plastic casing.
- Reinsert the internal circuit complete with the new electrode into the plastic casing.
- Fasten the screw on the back, below the battery compartment.
- Reinsert the battery compartment cover.
- Recalibrate the **SALINTEST** before performing new measurements.

