

Operating Instructions for Combined ORP Electrode LE501 and LE510

METTLER TOLEDO AG, Analytical
Sonnenbergstrasse 74
CH-8603 Schwerzenbach
Tel: +41 44 806 77 11
Fax: +41 44 806 73 50
<http://www.mt.com>

Mettler-Toledo AG 2007
Printed in P.R.China Ver. B



English

- When unpacking, check electrode for possible mechanical damage to the glass part, electrodes subject to complaints must be returned to our agent in the original box indicating the invoice number.
- Plug in and fasten the BNC connector to the socket on pH/mV meter. And set mV mode. Connect the temperature sensor if necessary.
- Take off watering cap and rinse electrode with distilled water. Then wipe the electrode with tissue paper.
- When measuring, make sure the platinum pin and diaphragm to immerse in sample solution together.
- Functional check and preconditioning can be made with Redox buffer solution (Order No. 51340065).
Note: The reading in mV depends on the reference system used. Conversion to redox potential related to standard hydrogen electrode (SHE)
 $E_H = E_{meas} + 207\text{mV}$ at 25°C, valid for Ag/AgCl reference system with electrolyte (Order No. 51340049/51340047).
- Slow response / drift
 - clean diaphragm (see 7);
 - clean and remove deposits from the metal ring with toothpaste or 2 M HCl;
 - rinse with distilled water;
 - change reference electrolyte.
- Contamination by:
 - Proteins– Use cleaning solution Pepsin/HCl

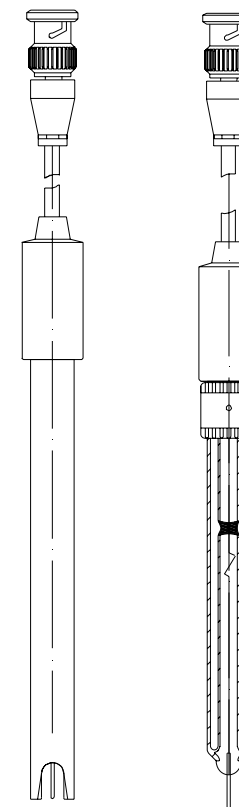
- (Order No. 51340068);
 - Sulfides– Use cleaning solution Thiourea (Order No. 51340070);
 - Oily/organic liquids– Rinse with acetone or ethanol (flammable);
 - Acid/alkaline-soluble– Rinse with 0.1 mol/l HCl or 0.1 mol/l NaOH.
- Check level of electrolyte which should be approx. 10mm below refilling aperture. Refill with 3M KCl+ AgCl (Order No. ME 51340045) for LE501. LE510 is not refillable.

Order No.
12107306 LE501 (glass body)
12107307 LE510 (plastic body)

Specifications
mV range: -2000 - +2000mV
Temperature range: 0-80°C
Type of frit: Nylon (LE510)
 Ceramic (LE501)
Cable and connections: 1m, BNC
Shaft length: 120mm
Shaft diameter: 12mm

Storage
Rinse or clean electrode after use and replace the wetting cap, partly filled (1/3) with reference electrolyte.

Applications
Water treatment (prechlorination and dechlorination), aquariums, poultry processing (disinfect skin), fruit and vegetable washing, pulp bleaching, chlorine addition (swimming pools) etc.



LE510 ORP electrode

LE501 ORP electrode