

# MSREF – MINIATURE REFERENCE ELECTRODE SELECTION GUIDE

## **MSREF**

The MSREF is an Ag/AgCl based miniature solid-state reference electrode to work with the sensors of the MSFET family. The MSREF can be used to replace bulky Ag/AgCl liquid junction reference electrodes. However, for measurements, where very good reference electrode potential is required, we still recommend the use of the classic (bulky) reference electrodes.

The MSREF miniature reference electrodes can be stored dry for several months before use and also between uses. A dry MSREF will require a hydration/conditioning time to activate the electrolyte.

## **MSREF** types

## MSREF2 (PVA):

- Good stability in buffers of varying salt content and ionic strength
- Good long-time stability
- Long lifetime (~6-9 months)
- Long hydration time (6-24h)
- Should not the subjected to temperatures above 80°C
- low resistance to acetone

#### MSREF1 (Ag/Agcl pellet):

- Short hydration time (1-4h)
- Sensitive to varying salt content (esp. Cl<sup>-</sup> content)
- Good lifetime in stable salt conditions (>6-9 month)
- Can withstand temperatures up to 150°C (max. exposure < 15min)
- good chemical resistance to solvents