

Sanitary Durafet Electrode Maintenance

Shelf Life and Storage

Periodic maintenance is required to ensure that the electrode does not dry out after prolonged shelf storage. Stored electrodes should be checked (by removing cap) once per year to ensure that the cotton packing is still wet.

For stored electrodes, perform the following procedures once per year:

1. Remove the electrode from its storage box and pull the vinyl cap from the sensing end.
2. Remove any excess crystals on the sensor area by rinsing with warm tap water.
3. Refill the cap with electrode storage solution (see “Precautions” in this manual).
4. Replace the cap on the electrode.
5. Place electrode back in its storage box. Mark the date on the box.

ATTENTION

Do not store electrode at or below -10°C ($+14^{\circ}\text{F}$) or above 50°C (122°F).

Cleaning

How often the electrode needs to be removed for cleaning depends on process conditions. Some process materials tend to adhere to the sensor and could interfere with the accuracy or time response of measurements. If it becomes necessary to remove the electrode for cleaning, proceed as follows:

1. Remove the electrode from service and disconnect the cable from the electrode.
2. Place the electrode under flowing warm tap water to remove any loose or lodged debris.
3. Remove oil deposits with a household detergent (Joy or Windex) or a laboratory detergent (Micro or Sparkleen).
4. Clean the electrode body with almost any commercial cleaning agent.
5. To clean mineral scaling from the sensor, use dilute hydrochloric acid or other dilute acid. After cleaning, rinse thoroughly in distilled water. Allow it to soak for an hour in a neutral buffer such as 6.86 pH buffer, Honeywell P/N 31103002. Wipe the sensor area gently with soft wet cotton swab.

If the reference electrode junction is clogged or dirty, remove the storage cap from the electrode (if necessary) and immerse the end of the electrode for one hour in tap water at approximately 90°C . If this does not fully unclog the reference electrode junction, perform the following:

1. Place the electrode in a beaker of saturated potassium chloride (KCl) solution and heat to boiling.
2. Remove from heat and let the electrode soak in this solution until it cools to room temperature.