

Dissolved Oxygen Sensor Storage & Shelf Life

Optical and Electrochemical Oxygen Sensors



Proper storage and shelf life questions come up often with dissolved oxygen sensors. There are two measurement technologies that are commonly used to measure dissolved oxygen and each technology has different storage requirements.

- ▶ Optical Dissolved Oxygen Sensors (ODO)
- ▶ Electrochemical Dissolved Oxygen Sensors (EDO)

General guideline for these products are listed below.

Optical Dissolved Oxygen Sensors

These products have no shelf life restrictions. They should be stored in a clean, dry environment prior to usage. Avoid prolonged exposure of the inside of the cap to ambient light. Optical dissolved oxygen products include the following:

- ▶ VisiFerm, VisiTrace, VisiFerm mA, VisiTrace mA, VisiPro, and VisiWater Sensors
- ▶ ODO Replacement Sensor caps (Ref # 243515, 243505, 243530, 10068400, 10078261)

Electrochemical Dissolved Oxygen Sensors

Electrochemical (polarographic) sensors should be stored in a clean, dry environment prior to usage. Some models, such as the OxyFerm, ship with a protective watering cap over the tip of the sensor. Other models, such as the OxyGold, ship with a yellow rubber cap. If the watering cap is used, it should be periodically inspected to ensure that liquid is present. Deionized water can be used if liquid needs to be added.

The sensors have no shelf life restrictions, however they require electrolyte to function properly. For short-term storage (< 1 month) the sensor can be stored with electrolyte in the membrane cap and the watering cap (Ref # 242004) installed. For long term storage, (> 1 month) we recommend powering the sensor to verify functionality. Upon power-up the sensor should provide an oxygen reading > 60% (Air-Sat) within several minutes. If the sensor is functional, remove power, drain the electrolyte from the sensor cap, rinse the internal cathode assembly with deionized water and store the sensor dry. The electrolyte provided with the sensor packaging has a shelf life of 2 years. If the electrolyte has expired prior to initial usage contact Hamilton for replacement solution. Electrochemical Dissolved Oxygen products include:



- ▶ OxyFerm, OxyGold, and OxySense Sensors
- ▶ EDO Replacement Membrane Kits (Ref # 237123, 237126, 237135, 23140)
- ▶ Replacement Electrolyte (Ref # 237118, 237136, 237138, 237139)