

## PRESERVATION OF SEPTRON ELECTRODEIONISATION MODULES Limitation of bacterial proliferation

**EXP 100** 

Storing SEPTRON electrodeionization modules may entail germ development hazards that are likely to impair downstream processes.

Though there is no absolute rule in terms of storage duration, we recommend to apply the following procedure for any storage period of more than 4 months.

- Switch off the SEPTRON modules.
- Prepare a solution of sodium chloride (NaCl) at 1 % (in weight) with osmosed water of good bacteriological quality (both preparation vessel and brine injection items shall have been previously disinfected).

For preparing this brine, we recommend the use of pure salt, code P0969024 (10-kg can).

The usual health and safety precautions shall be taken in order to limit to a maximum any contamination to the operators (wear at least an overall and disposable gloves)

 Inject the NaCl solution on the diluate side (D) into the module (opposite the normal module outlet under a pressure ranging within 0.1 – 0.2 bar and a flow-rate of about 70 - 120 l/h).

During this injection phase, **all** the other modules shall be connected to the sewer.

The injection time shall be of 12 hours in order to make sure that the brine is in contact with all module internal components.

Upon expiration of this period, drain approximately 100 - 300 ml out of the SEPTRON module then blank off each port with plugs (3/8").

This partial draining procedure is aimed at taking up module internal expansion due to temperature variations.

## Resetting the module to service

- Hydraulically reconnect the module.
- Flush module with the water to be processed until fully eliminating the brine (no chloride).
- Switch on the modules.
- Set the unit in accordance with the specified values (flow-rates, pressure, voltage, current).
- Obtaining a compliant water quality may take several days corresponding to module regeneration time.