Sanitary Spiral Elements
Storage Instructions

STORAGE INSTRUCTIONS

A. SHELF LIFE
   The spiral wound elements leave the factory stored in glycerin (UF/MF) or a solution of sorbic acid (NF/RO).
   From the date of shipment, the element shelf life in the original packaging is one year when stored in glycerin
   and six months when stored in sorbic acid. This assumes that the sealed bags have not been opened or
   damaged and the conditions shown in Sections B&C are met.

B. HANDLING
   1. The boxes should not be dropped or crushed.
   2. The elements should be stored horizontally.

C. NEW ELEMENT STORAGE CONDITIONS
   1. Keep the elements in their original packaging.
   2. Store indoors out of direct sunlight.
   3. Do not allow the elements to freeze and they should be kept at less than 40°C (104°F).
   4. The preferred long-term storage temperature range is 10°C to 30°C (50 to 86°F), at relative humidity below
      70%.

D. USED ELEMENT STORAGE SOLUTIONS
   1. Short-term shut-down (up to 24 hours): Elements should be thoroughly cleaned and left in water at 5-
      25°C (41 to 77°F).
   2. Mid-term shut-down (up to 30 days): Elements should be thoroughly cleaned. The following chemicals
      may be used to fill the vessels:
      a. KOCHKLEEN® 180 (or equivalent) adjusted to pH 3-4
      b. 2,000 ppm solution of sodium bisulfite (pH should be 3-4). **Do not use sodium bisulfite or sodium
         metabisulfite with SR3D elements.**
   3. Long-term shut-down (30 days or longer): Elements should be thoroughly cleaned. Follow the same
      procedure as the mid-term storage but replace the storage solution every 30 days.

E. POST-STORAGE CLEANING PROCEDURE (MID AND LONG-TERM ONLY)
   All elements should be cleaned according to KSS’ recommended pre-startup procedures prior to restarting the
   system on production.

F. WATER QUALITY GUIDELINES
   For water quality guidelines for storage solutions please refer to KSS Water Quality Guidelines for cleaning,
   diafiltration & storage.