NEW LOGIC RESEARCH
2527 Aviation Way, Minden NV 89423 USA • 775.783.7600 • www.vsep.com

NLR 103 –
MEMBRANE PRESERVATIVE

FREEZING AND BIOLOGICAL GROWTH

The loss of membrane performance due to freezing and or fouling of membrane surface by biological growth is common to many UF, NF and RO membranes worldwide. This damage or fouling can lead to reduced permeate flow, changes in rejection characteristics across the membrane system, increases in differential pressure and frequent membrane cleaning or replacement.

NLR 103 is an effective preservative solution used to extend the life of membranes and prevent freezing during transportation. This solution can be utilized to maintain membrane integrity during periods where the filter is not in use. This preservative is also recommended for membranes being stored. The solution will prevent biological contamination to your membranes and allows for longer storage periods.

PACKAGING

NLR-103 is shipped as a liquid in 5-gallon plastic containers, 55-gallon drums, or 260 gallon totes. The shelf life when stored unopened indoors at a temperature between 5°C and 30°C is one year from its date of manufacture. For specific pricing and delivery information, please contact New Logic.

HANDLING

NLR-103 is a preservative chemical and should not be mixed with other cleaners unless specified by the vendor.

Wear chemical resistant gloves when you expect long, constant exposure. It is also a good practice to wear safety glasses or goggles when using this product.

MEMBRANE STORAGE SOLUTIONS

Sanitizing is only necessary for flushed or used membrane materials, new filter packs or membrane cut samples will not need any added solution as these are shipped from the Factory with Preservative.

Sanitizing as shown below is necessary for non-use of more than two weeks.
Biological growth, for short term idle (less than two weeks), can be avoided by periodically flushing with warm water.

Preparing Filter Pack for Storage:

1. After operation on VSEP Machine flush membrane with clean warm water at low pressure and high crossflow for at least 15 minutes. Clean the membrane as described in the cleaning procedure provided by New Logic.
2. Prepare the feed tank with the storage solution, 1% NLR 103
3. Run the machine for 20-30 minutes and recirculate the solution as feed material and permeate the solution through the Filter Pack or Membrane.
Run the machine at low pressure and high crossflow.
4. Seal the Filter Pack Openings

Repeat this procedure every 90 days if temperature is below 80oF and every 60 days if temperature is above 80oF. For very long term storage, (4 months or more), the Filter Pack should be refrigerated or Consult New Logic for other procedures.

Note: Before reusing membrane the storage solution must be rinsed off in order to achieve normal permeate flow rates. Flushing for 20 minutes with clean water is usually enough. Flush first at low pressure and high crossflow, then, at high pressure. This will be necessary for newly arriving Filter Packs from New Logic as they are shipped after being rinsed in this solution.