CLAIMS

WHAT IS CLAIMED IS:

1. An apparatus configured to produce a disinfectant solution for use with disinfecting a medical device, the apparatus comprising:

a first container configured to receive water, sodium percarbonate, and tetraacetylethylenediamine, wherein the water, the sodium percarbonate and the tetraacetylethylenediamine react within the first container to produce a mixture comprising peroxyacetic acid and having a pH between 9.0 and 14.0; and

a second container in fluid communication with the first container, the second container configured to receive an acid and the mixture from the first container, wherein the mixture and the acid mix in the second container to produce a disinfectant solution having a pH between 5.0 and 7.0.

2. The apparatus of claim 1, wherein at least one of: the first container and the second container comprise a mixer configured to facilitate at least one of: dissolving of the sodium percarbonate in the water to produce hydrogen peroxide and mixing the hydrogen peroxide and the tetraacetylethylenediamine to produce the mixture comprising peroxyacetic acid.

3. The apparatus of claim 1, further comprising a pump coupled to at least one of: the first container and the second container, wherein the pump is configured to provide at least one of: the water to the first container at a first flow rate of at least 1 gallon per minute and the mixture to the second container at a second flow rate of at least 1 gallon per minute.

4. The apparatus of claim 3, wherein the first flow rate facilitates the dissolving of the sodium percarbonate in the water to produce hydrogen peroxide and the reaction of the hydrogen peroxide and the tetraacetylethylenediamine, and wherein the second flow rate facilitates the mixing of the mixture and the acid.

5. The apparatus of claim 1, further comprising a filter, wherein the filter is configured to at least partially remove undissolved solid from the mixture comprising peroxyacetic acid.