WHAT IS CLAIMED IS:

1. A method of sterilizing ~~a~~ an unused contact lens (105) to a Sterility Assurance Level (SAL) of 10^{-6} comprising:

sterilizing said unused contact lens (105) with an application of electrolyzed brine (190) as an in-package sterilizing agent;

wherein said electrolyzed brine is sealed with said unused contact lens in an initial packaging of said contact lens.

~~2. The method of claim 1, wherein said electrolyzed brine (190) is sealed with said contact lens (105) in the initial packaging (110, 162) of said contact lens.~~

2~~3~~. The method of claim ~~2~~ 1, further comprising heating said initial packaging (110, 162) to seal a foil (107) to a container (110, 162) housing said contact lens (105) and electrolyzed brine (190), wherein said heating is effective to at least partially sterilize said lens (105).

3~~4~~. The method of claim ~~3~~ 2, wherein said heating is further effective to promote decomposition of said electrolyzed brine (190).

4. The method of claim 2, wherein said container (110, 162) comprises a boat.

5. The method of claim 2, wherein said container (110, 162) comprises a laminated aluminum foil (107).

6~~5~~. The method of claim ~~2~~ 1, further comprising adding a surfactant to said electrolyzed brine (190) after said brine (190) is electrolyzed to prevent said contact lens (105) from adhering to said initial packaging (110, 162).

76. The method of claim ~~2~~ 1, wherein a material used to form said contact lens (105) contains a surfactant which leaches into said electrolyzed brine (190) to prevent said contact lens (105) from adhering to said initial packaging (110, 162).

87. The method of claim 1, wherein said electrolyzed brine (190) also contains a pH buffer.

98. The method of claim ~~2~~ 1, further comprising autoclaving (111) said initial packaging (110, 162) to further sterilize said contact lens (105).

~~9. The method of claim 3, wherein said container (110, 162) comprises a boat.~~

~~10. The method of claim 3, wherein said container (110, 162) comprises a laminated aluminum foil (107).~~

1011. A system for sterilizing a new contact lens (105) in initial packaging (110, 162) to a Sterility Assurance Level (SAL) of 10^{-6}, said system comprising:

a generator (152) for producing electrolyzed brine (190) with biocidal activity; and

a dispenser (163) for dispensing a quantity of electrolyzed brine (190) from said generator (152) into said initial packaging (110, 162) with said new contact lens (105).

1112. The system of claim ~~11~~ 10 , wherein said generator (152) comprises a mixer (165) that mixes salt with water to produce a brine solution that is then electrolyzed by said generator (152).

1213. The system of claim ~~11~~ 10 , wherein said generator (152) comprises an anode chamber (153) and a cathode chamber (154) separated by a membrane (151) with a system for delivering a quantity of brine solution (150) into each of said anode chamber (153) and said cathode chamber (154).

13~~14~~. The system of claim ~~11~~ 10, wherein said generator (152) is configured to produce said electrolyzed brine (190) with a pH between 7.20 and 7.70.

14~~15~~. The system of claim ~~11~~ 10 , wherein said electrolyzed brine (190) is configured to decompose to an innocuous saline solution in between 2 and 12 hours from generation.

15~~16~~. A method of sterilizing a contact lens (105) comprising:

generating a quantity of electrolyzed brine;

placing said electrolyzed brine in a dispenser;

disposing a newly manufactured contact lens in a contact lens package;

presenting said contact lens package containing said newly manufactured contact lens adjacent to said dispenser; and

dispensing a quantity of said electrolyzed brine from said dispenser into said contact lens package to at least partially ~~sterilizing~~ sterilize said contact lens (105) with ~~an application of~~ said dispensed electrolyzed brine (190).

16~~17~~. The method of claim ~~16~~ 15, further comprising heat sealing said contact lens (105) in a primary package (110, 162);

wherein said heat sealing enhances a rate of biocidal activity of said electrolyzed brine (190).

17~~18~~. The method of claim ~~16~~ 15, further comprising:

packaging said contact lens (105) within a package (110, 162); and

passing said packaging (110, 162) and said contact lens (105) through an autoclave (111) to further sterilize said contact lens (105).

18~~19~~. The method of claim ~~16~~ 15, further comprising packaging said contact lens (105) and said electrolyzed brine (190) in a contact lens package (110, 162), wherein said application of said electrolyzed brine (190) and said packaging of said contact lens (105) in said contact lens package (110, 162) comprises a flow-line process.

19~~20~~. The method of claim ~~16~~ 15, further comprising adding a bicarbonate to said electrolyzed brine (190).

20. The method of claim 15. wherein said electrolyzed brine dispensed into said contact lens package containing said newly manufactured contact lens sterilizes said newly manufactured contact lens to a Sterility Assurance Level (SAL) of 10^{-6}.