CLAIMS:

1. A delamination resistant glass pharmaceutical container comprising:

an aluminosilicate glass having a Class HGA 1 hydrolytic resistance when tested according to ISO 720-1985 testing standard, the aluminosilicate glass comprising greater than 70 mol.% and less than or equal to 80 mol.% SiO_2;

a compressive stress layer with a depth of layer of greater than 25 μm; and

a surface compressive stress of greater than or equal to 350 MPa, wherein the delamination resistant glass pharmaceutical container is ion exchange strengthened and the ion exchange strengthening comprises treating the delamination resistant glass pharmaceutical container in a molten salt bath for a time less than or equal to 5 hours at a temperature less than or equal to 450°C.

2. The delamination resistant glass pharmaceutical container of claim 1, wherein the delamination resistant glass pharmaceutical container has a type HGA1 hydrolytic resistance according to ISO 720 after ion exchange strengthening.

3. The delamination resistant glass pharmaceutical container of any of claims 1-2, wherein the delamination resistant glass pharmaceutical container has a threshold diffusivity of greater than 16 μm^2/hr at a temperature of less than or equal to 450°C.

4. The delamination resistant glass pharmaceutical container of any of claims 1-3,, wherein the threshold diffusivity is greater than or equal to 20 μm^2/hr at a temperature of less than or equal to 450°C.

5. The delamination resistant glass pharmaceutical container of any of claims 1-4, wherein the delamination resistant glass pharmaceutical container is free of boron and compounds of boron.

6. The delamination resistant glass pharmaceutical container of any of claims 1-5, wherein the delamination resistant glass pharmaceutical container comprises K_2O in an amount greater than or equal to 0 mol.% and less than or equal to 3 mol.%.