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;

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 $\mu m^2/hr$ 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 $\mu m^2/hr$ 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. A delamination resistant glass pharmaceutical container:

a glass body having an interior surface and an exterior surface, wherein at least the interior surface of the glass body has a delamination factor of less than or equal to 10; and

a heat-tolerant coating bonded to at least a portion of the exterior surface of the glass body, wherein the exterior surface of the glass body with the heat-tolerant coating has a coefficient of friction of less than about 0.7,

wherein the coefficient of friction is a maximum coefficient of friction measured relative to a second glass container in a vial-on-vial testing jig under a normal load of 30 N, the second glass container having a body formed from a same glass composition and comprising the heat-tolerant coating on an at least a portion of the outer surface of a body of the second glass container and subjected to the same environmental conditions prior to measurement.

7. A delamination resistant glass pharmaceutical container:

a glass body having an interior surface and an exterior surface, wherein at least the interior surface of the glass body has a delamination factor of less than or equal to 10; and

a heat-tolerant coating bonded to at least a portion of the exterior surface of the glass body, wherein:

the heat-tolerant coating is thermally stable at a temperature of at least 260°C for 30 minutes;

the exterior surface of the glass body with the heat-tolerant coating has a coefficient of friction of less than about 0.7; and

the coefficient of friction is a maximum coefficient of friction measured relative to a second glass container in a vial-on-vial testing jig under a normal load of 30 N, the second glass container having a body formed from a same glass composition and comprising the heat-tolerant coating on an at least a portion of the outer surface of a body of the second glass container and subjected to the same environmental conditions prior to measurement.

8. The delamination resistant glass pharmaceutical container of any of claims 6-7, wherein the heat-tolerant coating is thermally stable at a temperature of at least 320°C for 30 minutes.

9. The delamination resistant glass pharmaceutical container of any of claims 6-8, wherein the glass body has an interior region extending from below the interior surface of the glass body and into a wall thickness of the glass body, the interior region having a persistent layer homogeneity.

10. The delamination resistant glass pharmaceutical container of any of claims 6-9, wherein the interior surface of the glass body has a persistent surface homogeneity.

11. The delamination resistant glass pharmaceutical container of any of claims 6-10, wherein the glass body comprises an aluminosilicate glass composition.