

What is claimed is:

1. A glass article, comprising:

a glass sheet with a front face having a width and a height, a back face opposite the front face, and a thickness between the front face and back face forming four edges around the front and back faces,

wherein the glass sheet comprises:

between about 70 mol % to about 85 mol% SiO_2 ,
between about 0 mol% to about 5 mol% Al_2O_3 ,
between about 0 mol% to about 5 mol% B_2O_3 ,
between about 0 mol% to about 10 mol% Na_2O ,
between about 0 mol% to about 12 mol% K_2O ,
between about 0 mol% to about 4 mol% ZnO ,
between about 3 mol% to about 12 mol% MgO ,
between about 0 mol% to about 5 mol% CaO ,
between about 0 mol% to about 3 mol% SrO ,
between about 0 mol% to about 3 mol% BaO , and
between about 0.01 mol% to about 0.5 mol% SnO_2 .

2. A glass article, comprising:

a glass sheet with a front face having a width and a height, a back face opposite the front face, and a thickness between the front face and back face forming four edges around the front and back faces,

wherein the glass sheet comprises:

greater than about 80 mol % SiO_2 ,
between about 0 mol% to about 0.5 mol% Al_2O_3 ,
between about 0 mol% to about 0.5 mol% B_2O_3 ,
between about 0 mol% to about 0.5 mol% Na_2O ,
between about 8 mol% to about 11 mol% K_2O ,
between about 0.01 mol% to about 4 mol% ZnO ,
between about 6 mol% to about 10 mol% MgO ,
between about 0 mol% to about 0.5 mol% CaO ,
between about 0 mol% to about 0.5 mol% SrO ,
between about 0 mol% to about 0.5 mol% BaO , and

between about 0.01 mol% to about 0.11 mol% SnO₂.

3. A glass article, comprising:

a glass sheet with a front face having a width and a height, a back face opposite the front face, and a thickness between the front face and back face forming four edges around the front and back faces,

wherein the glass sheet is substantially free of Al₂O₃ and B₂O₃ and comprises:

greater than about 80 mol % SiO₂,

between about 0 mol% to about 0.5 mol% Na₂O,

between about 8 mol% to about 11 mol% K₂O,

between about 0.01 mol% to about 4 mol% ZnO,

between about 6 mol% to about 10 mol% MgO, and

between about 0.01 mol% to about 0.11 mol% SnO₂.

4. The glass article of Claim 3, wherein the glass sheet is substantially free of B₂O₃, Na₂O, CaO, SrO, or BaO, and combinations thereof.

5. A glass article, comprising:

a glass sheet with a front face having a width and a height, a back face opposite the front face, and a thickness between the front face and back face forming four edges around the front and back faces,

wherein the glass sheet comprises an alumina free, potassium silicate composition comprising:

greater than about 80 mol % SiO₂,

between about 8 mol% to about 11 mol% K₂O,

between about 0.01 mol% to about 4 mol% ZnO,

between about 6 mol% to about 10 mol% MgO, and

between about 0.01 mol% to about 0.11 mol% SnO₂.

6. The glass article of Claim 5, wherein the glass sheet is substantially free of B₂O₃, Na₂O, CaO, SrO, or BaO, and combinations thereof.

7. A glass article, comprising:
a glass sheet with a front face having a width and a height, a back face opposite the front face, and a thickness between the front face and back face forming four edges around the front and back faces,
wherein the glass sheet comprises:
between about 72.82 mol % to about 82.03 mol% SiO_2 ,
between about 0 mol% to about 4.8 mol% Al_2O_3 ,
between about 0 mol% to about 2.77 mol% B_2O_3 ,
between about 0 mol% to about 9.28 mol% Na_2O ,
between about 0.58 mol% to about 10.58 mol% K_2O ,
between about 0 mol% to about 2.93 mol% ZnO ,
between about 3.1 mol% to about 10.58 mol% MgO ,
between about 0 mol% to about 4.82 mol% CaO ,
between about 0 mol% to about 1.59 mol% SrO ,
between about 0 mol% to about 3 mol% BaO , and
between about 0.08 mol% to about 0.15 mol% SnO_2 .
8. The glass article of Claim 7, wherein the glass sheet is substantially free of Al_2O_3 , B_2O_3 , Na_2O , CaO , SrO , or BaO , and combinations thereof.
9. The glass article of any of the preceding claims, wherein the glass has a color shift < 0.008.
10. The glass article of any of the preceding claims, wherein the glass has a color shift < 0.005.
11. The glass article of any of the preceding claims, wherein the glass has a strain temperature between about 512 °C and 653 °C.
12. The glass article of any of the preceding claims, wherein the glass has an annealing temperature between about 564 °C and 721 °C.
13. The glass article of any of the preceding claims, wherein the glass has a softening temperature between about 795 °C and 1013 °C.

14. The glass article of any of the preceding claims, wherein the glass has a CTE between about $64 \times 10^{-7}/^{\circ}\text{C}$ to about $77 \times 10^{-7}/^{\circ}\text{C}$.
15. The glass article of any of the preceding claims, wherein the glass has a density between about 2.34 gm/cc @ 20 C and about 2.56 gm/cc @ 20 C.
16. The glass article of any of the preceding claims, wherein the glass article is a light guide plate.
17. The glass article of Claim 16, wherein the thickness of the plate is between about 0.2 mm and about 8 mm.
18. The glass article of Claim 16, wherein the light guide plate is manufactured from a fusion draw process, slot draw process, or a float process.
19. The glass article of any of the preceding claims, wherein the glass comprises less than 1 ppm each of Co, Ni, and Cr.
20. The glass article of any of the preceding claims, wherein the concentration of Fe is < about 20 ppm.
21. The glass article of any of the preceding claims, wherein the concentration of Fe is < about 10 ppm.
22. The glass article of any of the preceding claims, wherein the transmittance at 450 nm with at least 500 mm in length is greater than or equal to 85%, the transmittance at 550 nm with at least 500 mm in length is greater than or equal to 90%, or the transmittance at 630 nm with at least 500 mm in length is greater than or equal to 85%, and combinations thereof.
23. The glass article of any of the preceding claims, wherein the glass sheet is chemically strengthened.

24. The glass article of Claim 23, wherein the glass comprises between 0.1 mol% to no more than about 3.0 mol% of one or combination of any of ZnO, TiO₂, V₂O₃, Nb₂O₅, MnO, ZrO₂, As₂O₃, SnO₂, MoO₃, Sb₂O₃, and CeO₂.
25. A glass article, comprising:
a glass sheet with a front face having a width and a height, a back face opposite the front face, and a thickness between the front face and back face forming four edges around the front and back faces,
wherein the glass sheet is substantially free of Al₂O₃ and B₂O₃ and comprises greater than about 80 mol % SiO₂, and
wherein the glass has a color shift < 0.005.
26. The glass article of Claim 25, wherein the glass sheet comprises:
between about 8 mol% to about 11 mol% K₂O,
between about 0.01 mol% to about 4 mol% ZnO,
between about 6 mol% to about 10 mol% MgO, and
between about 0.01 mol% to about 0.11 mol% SnO₂.
27. A glass article, comprising:
a glass sheet with a front face having a width and a height, a back face opposite the front face, and a thickness between the front face and back face forming four edges around the front and back faces,
wherein the glass sheet is substantially free of Al₂O₃, B₂O₃, Na₂O, CaO, SrO, and BaO, and
wherein the glass has a color shift < 0.005.
28. The glass article of Claim 27, wherein the glass sheet comprises greater than about 80 mol % SiO₂.
29. The glass article of Claim 27, wherein the glass sheet comprises:
between about 8 mol% to about 11 mol% K₂O,
between about 0.01 mol% to about 4 mol% ZnO,
between about 6 mol% to about 10 mol% MgO, and
between about 0.01 mol% to about 0.11 mol% SnO₂.