



# Borosilicate glass

**Borosilicate glass** is a type of glass with silica and boron trioxide as the main glass-forming constituents. Borosilicate glasses are known for having very low coefficients of thermal expansion ( $\approx 3 \times 10^{-6} \text{ K}^{-1}$  at 20 °C), making them more resistant to thermal shock than any other common glass. Such glass is subjected to less thermal stress and can withstand temperature differentials without fracturing of about 165 °C (300 °F).<sup>[1]</sup> It is commonly used for the construction of reagent bottles and flasks, as well as lighting, electronics, and cookware.



Guitar slide made of borosilicate glass

Borosilicate glass is sold under various trade names, including Borosil, Duran, Pyrex, Glassco, Supertek, Suprax, Simax, Bellco, Marinex (Brazil), BSA 60, BSC 51 (by NIPRO), Heatex, Endural, Schott, Refmex, Kimax, Gemstone Well, United Scientific, and MG (India).

Single-ended self-starting lamps are insulated with a mica disc and contained in a borosilicate glass gas discharge tube (arc tube) and a metal cap.<sup>[2][3]</sup> They include the sodium-vapor lamp that is commonly used in street lighting.<sup>[4][5][2][3]</sup>

Borosilicate glass usually melts at about 1,650 °C (3,000 °F; 1,920 K).