## **Tanzanite** $[Ca_2Al_3(SiO_4)(Si_2O_7)O(OH)]$

The dark blue variety of zoisite is called tanzanite, and forms distinct prismatic crystals that have vertically-striated crystal faces. Tanzanite is highly collectable and prized, especially in gem-quality specimens. It is frequently heat-treated to help remove imperfections and to enhance the dark blue color. Most specimens of tanzanite have distinct pleochroism, that is, they display different colorations depending on the direction of light passing through the crystal. Tanzanite may appear gray, purple, blue or burgundy depending on the composition and the angle from which it is viewed. This play on color makes tanzanite highly alluring to many different collectors. Tanzanite is reddish brown when found and all tanzanite is heated to 600°C to bring out the blue-violet color of the mineral. The country of Tanzania is the only known locality where tanzanite occurs.



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