Vivianite $[Fe_3^{2+}(PO_4)_2 \cdot 8H_2O]$

Vivianite is a rare, iron phosphate mineral found in ore deposits near the surface of the earth. Originally forming pale greenish-blue crystals, the color of vivianite darkens upon exposure to light. This change of color is caused by a chemical transformation of iron, a form of molecular oxidation. Continued exposure to light may eventually turn a specimen black and completely opaque. Large, tabular specimens, such as this one from Bolivia, often are kept in storage due to its unusual color-changing ability. B36



Vivianite B36