

Mineral Spotlight: Hemimorphite

Exhibiting a striking and uncommon milky sky blue color, hemimorphite stands out in its beige sedimentary environment. This week's specimen exhibits a bubbly, or botryoidal, texture on the surface. It is a hydrous zinc silicate with the chemical formula $Zn_4Si_2O_7(OH)_2 \cdot H_2O$.

Hemimorphite is pyroelectric, meaning that it generates an electrical charge when heated. The name stems from the fact that the crystal has two distinct terminations at opposite sides of the crystal. This is described as a "hemimorphic" crystal.

Historically known as calamine, hemimorphite and smithsonite, a zinc carbonate, were considered to be the same mineral until the mid-1800's. They have similar visual properties and are difficult to distinguish due to the fact that they frequently are intergrown with each other. The two minerals are still made into calamine lotion, used medicinally for mild itchiness from bug bites, poison oak, poison ivy and other skin irritants.

Hemimorphite forms in oxidized hydrothermal deposits, occurring within other sedimentary deposits. China, Mexico, and the southwest United States produce some of the best specimens. Other good sources are Italy, Namibia, and the Congo.

This feature was posted on Dice Museum social media by Museum intern Josian Aardema on 7/17/2023.

