

Mineral Spotlight: Halite

We hope you're not salty when you realize this week's mineral is halite! Though you may know NaCl as common cooking salt, mineralogists call it halite, a mineral in the halide group. Halides consist of a metal bonded with a common halogen (F, Cl, Br, or I).

Just like the little pieces of salt we put on food, halite is usually cubic. Sometimes, growth around the edges of the crystals can outpace growth in the center, creating crystals with pronounced edges and concave sides. These are called hopper crystals.

As you may expect, halite deposits are often precipitated out of evaporating sea beds. A place where you can see this formation happening in real time is in Utah, at the salt lakes and salt flats.

Halite can be a variety of colors. Most usually, it is clear, white, or gray. An orange or pink color can come from trace amounts of hematite (iron). A deep blue or indigo color can be the result of halite being exposed to natural radiation when the salt is deposited next to radioactive, potassium-bearing minerals like Sylvite. The gamma radiation from K-40 deforms the internal structure of the halite, causing it to reflect visible light in a quite beautiful way.

This feature was posted on Dice Museum social media by Museum curator Jillian Herlinger on 7/12/2022.

