

Covellite CuS

This is the copper sulfide mineral named after the Italian Nicolas Covelli in 1832 has beautiful iridescent crystals. The crystal habit for this mineral varies from massive to foliated, and when crystals form, they usually appear in thin, tabular, and hexagonal plates. This mineral will form as an alteration product of other copper minerals. It is very soft hence has a hardness of 1.5-2 and is also very heavy. It is opaque, and it is worth noting that it has a submetallic luster. When heated will produce a blue flame. Covellite will occur in hydrothermal veins that are associated with other minerals or alternatively produced by the metamorphic dissociation of calcareous chalcantite, and chalcopyrite- bearing rocks. Covellite is an ore of copper, and is used in lithium-ion batteries, and in nanostructures (nanoplates) and (nanocrystals).



Covellite R29