

Alexandrite - June



Alexandrite is the *color changing* variety of the mineral Chrsoberyl. This gemstone's color varies from red to green depending upon the light source.

Alexandrite is named for the former czar of Russia, Alexander II, and was first discovered in the Ural Mountains of Russia, supposedly on the day of his birth.

Chromium gives alexandrite its color and while, in most minerals, a trace element like chromium would provide only one color to the mineral, in alexandrite it gives it two! Coloring agents are dependent on the wavelength of light and the chemical bonds in the crystal to determine the color that they will cause.

An element like copper, in normal light, can cause a green color in malachite and a blue color in azurite, it all depends on the character of the chemical bonding. In a single specimen of alexandrite, the chromium is in such a balanced situation that the color of the specimen depends on the character of light that hits the crystal.

If the light is natural sunlight or fluorescent light, the crystal will be green; however, if the light is incandescent light from a common indoor light bulb, then the crystal will appear red.

Synthetic corundums spiked with trace elements that yield an alexandrite-like color change are sold as alexandrite on the gemstone market. These stones have a red-violet, near-amethyst color in incandescent light and a blue-violet color in daylight. They are far cheaper than natural alexandrites, which are some of the rarest and most expensive of gemstones.