

Spinel

A symbol of power, victory and new hope.

With increasing prominence, a wide color range and reasonable prices, spinel is highly sought after by high-end jewelers. The name spinel comes from the Latin "spina" meaning "thorn," which refers to the shape of spinel crystals. Spinel has often been mistaken for other gemstones, especially ruby. The most famous 170 ct "Black Prince's Ruby" given by the Spanish king to the Black Prince of England as a payment for a battle victory, and the 361 ct "Timur Ruby" are actually fine large red spinels. Other large spinels are treasured in the royal collections of India, Russia and other countries.

Color

Spinel occurs in a range of hues, from orange to intense red, vibrant pink, and all shades of purple, blue and violet through bluish green. Intense reds and pinks are caused by traces of chromium. Orange and purple stones contain a mixture of iron and chromium. Violet to blue spinel can be colored by iron, whereas rare vibrant blues owe their saturated color to cobalt.



Spinel has a large range of hues including red, pink, lilac and blue, which are considered the most commercially important and available.

Clarity

Lighter colors of spinel are expected to be relatively free of inclusions but saturated reds and blues are rare and sometimes included. The most valuable spinels have no eye-visible inclusions. However, some spinels may have beautiful inclusions which reflect the gem's octahedral crystal growth. When they appear in groups, they resemble human fingerprints.

Sources

Fine large spinel crystals, historically referred to as "Balas rubies," were mined in central and southeast Asia. Key mining locations are Myanmar, Tajikistan, Sri Lanka, Vietnam and Tanzania.

Treatments

Some spinel might be subjected to heat treatment to improve clarity, but it is a stable treatment. In rare cases, spinel may also be fracture filled to improve its apparent clarity.



Images courtesy: Edward Boehm, RareSource; Nomad's Co.

Major Sources

Myanmar, Sri Lanka, Tajikistan, Tanzania, Vietnam

Mineral

Spinel

Mohs Hardness

8

Toughness

Good

Color

Red, orange, pink, purple, blue, black

Birthstone

August

Care and Cleaning

While ultrasonic cleaners and steam cleaners are usually safe, certain inclusions could pose a potential problem. It's always safe to clean spinel with warm, soapy water.