

# Benitoite



By Mineral Masterpiece

## Description/History

Benitoite is a rare and desirable gem whose colour is mostly a blue to violetish - blue – frequently linked to sapphire. The gem in very rare circumstances can be pink or violet.

It occurs in a number of sites, but gemstone quality material has only been found in California.

It is a rare mineral found in very few locations including San Benito County, from where its name originated.

It has been named California's official state gem since 1985.

It was first discovered in 1907, and it was mistaken for sapphire. Nearly a year later, it was identified as a new mineral.

Other rare gems found in association with benitoite are neptunite and natrolite.



By Benitoite Mine

## Geology/Properties

Benitoite is a rare blue barium titanium silicate mineral. It is found in hydrothermally altered serpentine. An almost colorless crystal is strongly pleochroic and can exhibit along the main crystal axis a rich blue color that rivals that of fine sapphires. It has a high dispersion value, approximately the same as diamonds, but the stone's strong body color masks its exceptionally strong fire. It has poor cleavage.

Its crystal structure is unlike any other mineral. It crystallizes in the ditrigonal / dipyramidal system. While this class is technically hexagonal, it produces triangular looking crystals. Benitoite is a fluorescent mineral, and nearly all specimens will fluoresce.

The origin of color in the gem stone has not been completely determined yet, but it does contain traces of iron.

It is found most frequently as grey to greenish colours crystals with very heavy inclusions.



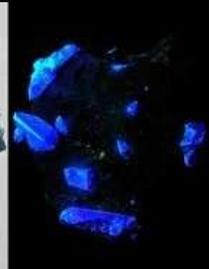
By Magnet Cove Rocks



By University of Texas



By World Craft



## Synthetic/Imitations

There are no synthetic counterparts to benitoite. There are also no enhancements that are done to the gemstone.



By Rocks and Minerals

Refractive index	1.756 – 1.804
Hardness	6 - 6.5 Mohs scale
Specific gravity	3.6 – 3.7
Crystal System	Hexagonal, dipyramidal
Crystal Habit	Tabular
Fracture	Conchoidal
Luster	Vitreous



By Real Gems

## Evaluation and Use



By Tudojoia

The mineral is highly prized and highly priced. Fine benitoites trade at approximately a \$1000 / ct. The largest known faceted benitoite weighs 15.43 ct. Stones over 1 ct. are rare. Because of its rarity, it is mainly a collector's stone. Benitoite is mostly used as specimens; fine specimens are in demand by collectors. Rarely, Benitoite is faceted as a mixed cut to be used in jewelry.

## Cleaning/Care

Lukewarm soapy water and a soft brush is the safest way to clean benitoite.



By ITECO Inc.

## Metaphysical/Astrological Properties

Benitoite's astrological sign is Virgo.

It vibrates to the number 9.

Benitoite can aid in allowing transmission of thoughts between two individuals.

It brings lightness and joy with depth of beauty and thought to its wearer, enhancing movement and activity.

It's a great benefactor to the well being of one's physical, emotional and intellectual selves.

It is an excellent healing stone, useful for expediting the healing process and for integrating and releasing the basic cause of disease.



By Jewelry Expert