

EMERALD

Emerald is the bluish green to green variety of beryl, a mineral species that includes aquamarine.



ABOUT EMERALD



Gem experts differ on the degree of green that makes one stone an emerald and another stone a less-expensive green beryl.

Most gemologists, gemological laboratories, and colored stone dealers call a stone green beryl when its color is "too light" for it to be classified as emerald. Even among that group, however, there's a difference of opinion about what's considered "too light."

BIRTHSTONES & ANNIVERSARIES

As the gem of spring, emerald is the perfect choice as the birthstone for the month of May. It's also the gem of the twentieth and thirty-fifth wedding anniversaries.

TREATMENTS

There are a number of processes used to alter the color, apparent clarity, or improve the durability of gems.

SYNTHETICS

Some gemstones have synthetic counterparts that have essentially the same chemical, physical, and optical properties, but are grown by man in a laboratory.

IMITATIONS

Any gem can be imitated—sometimes by manmade materials or by natural materials chosen by man to impersonate a particular gem.

2.97 BILLION YEARS

Age of the oldest emeralds, from South Africa.

CLEOPATRA

Pharaoh known for her passion for emeralds.

\$6,578,500

2011 sales price for Elizabeth Taylor's emerald pendant - that's \$280,000 per carat.

FACTS

MINERAL: Beryl

CHEMISTRY: $\text{Be}_3\text{Al}_2\text{Si}_6\text{O}_{18}$

COLOR: Vibrant green

REFRACTIVE INDEX: 1.577 to 1.583

SPECIFIC GRAVITY: 2.72

MOHS HARDNESS: 7.5 to 8

BIREFRINGENCE: 0.005 to 0.009



WHY WE LOVE THIS GEMSTONE

THREE-PHASE INCLUSIONS

Three-phase inclusions in Colombian emeralds contain tiny crystals of rock salt, liquid, and a bubble of gas.

HEXAGONAL CRYSTALS

The best emerald crystals are gorgeous flat-topped green hexagonal columns that are as beautiful as faceted stones.

ANCIENT EGYPT

The first known emerald mines were in Egypt. It is believed that these mines were worked as early as 3500BC.