

# Emerald

*An amulet believed to protect against evil spells.*

Emerald has enthralled the elites of civilizations with its stunning beauty and symbolic power for over 6,000 years. The name comes from the old French “esmeralde” through Latin “smaragdus” through Greek “smargdos.” One of the world’s first emerald mines in Egypt was named “Cleopatra’s emerald mine” for her lifetime love affair with the stone. Emeralds from what is now Colombia were part of the plunder when 16<sup>th</sup> century Spanish explorers invaded the New World. The Spanish, who treasured gold and silver far more than gems, traded emeralds for precious metals. Their trades opened the eyes of European and Asian royalty to emerald’s majesty.

## Color

Emerald is the green to bluish green variety of the mineral beryl colored by trace elements of chromium and vanadium. The most desirable emerald colors are bluish green to pure green with strong to vivid color saturation and medium to medium-dark tone. An emerald’s hue, tone and saturation determine its value.



*Many Mughal-era jewelry pieces featured carved emerald.*

*Nearly all emeralds contain inclusions, many of which are visible to the naked eye. These inclusions are often described as “jardin,” the French word for garden.*



*Well-formed emerald crystals in matrix, such as this specimen from the Cosquez mine in Colombia, are highly collectible.*



If the hue is too yellowish or bluish, the stone is not an emerald.

## Clarity

Emeralds are inherently more included than most other gemstones. Eye-clean stones are very rare. Unlike most other stones, visible inclusions are acceptable in emeralds unless they are so numerous as to affect the transparency of the stone. The most prized emeralds are highly transparent with even color distribution and no eye-visible color zoning.

## Sources

Colombia, Brazil, Zambia and Zimbabwe supply the majority of emeralds on the international market. Colombia produces what many consider to be the highest quality and volume of emeralds. The Colombian emerald has been widely accepted as the world’s most desirable pedigree and its mines remain a prized locality to this day.

## Treatments

Filling surface-reaching fractures or fissures with oil can make them less noticeable, which increases transparency and improves the apparent color of an emerald. Since oil can leak or dry after a period of time, the use of paraffin or resins are sometimes used as a more stable filler.



Images courtesy: Anonymous Gift; Diana Benoit; Ron Ringsrud

## Major Sources

Afghanistan, Brazil, China, Colombia, Ethiopia, India, Madagascar, Nigeria, Pakistan, Russia, Zambia, Zimbabwe

## Mineral

Beryl

## Mohs Hardness

7.5 to 8

## Toughness

Fair to Good

## Color

Green to bluish green

## Birthstone

May

## Care and Cleaning

Since the great majority of fashioned natural emeralds contain filled fractures, it’s risky to clean them ultrasonically or with steam. Ultrasonic vibrations and hot steam can cause oil or unhardened resin to sweat out of fractures. Using warm, soapy water coupled with gentle scrubbing is the safest way to clean emeralds.