



# Emerald

## The green stone of wonder

Emeralds have a very long history dating back to as long ago as 1650 B.C., in upper Egypt, according to "Encyclopedia Britannica."

This green stone has a special place in many cultures. In India, many believe in their healing properties and that they promise both good luck and well being. In ancient Rome, green was the colour of Venus, the goddess of beauty and love. In China, some emeralds could pass off as top quality jadeite jade.



### So what are emeralds?

They belong to the Beryl family, Beryllium Aluminium Silicate ( $(\text{Be}_3\text{Al}_2(\text{SiO}_3)_6)$  coloured green by trace amounts of chromium and sometimes vanadium. Fine Emeralds can be found in Columbia, Zambia, Brazil, Zimbabwe, Madagascar, Pakistan, India, Afghanistan and Russia.

Emeralds are relatively hard, hardness of 7.5-8 on the Moh's scale of hardness. Due to it's physical make up, emeralds tend to have many fissures and inclusions making it brittle and therefore difficult to cut. This is one of the reasons why emeralds that are free from inclusions are very rare and valued higher.

### What about treatment?

When buying an emerald, it is a known fact that the stone is has been clarity enhanced with either oil or resins. There are people who believe that oil is still better as it is organic and more natural, though some also believe that resin last longer and does not dry up.

As it is difficult to differentiate the clarity enhancement method, many gemological labs has resound to instead of stating what kind of clarity enhancement, they started state only the degree of clarity enhancement. Some gem labs would term the degree to be "none", "insignificant", "minor", "minor to moderate", "moderate" and significant.

### What to look out for when buying emeralds?

First, make sure that the emerald is a natural stone and to what degree is the stone treated.

### After this we can start to examine the 4 Cs

1. Carat
2. Colour
3. Clarity
4. Cut

All these characteristics are equally important, yet the more perfect the stone, the more you have to pay with that said, go for the emerald that appeals most to you!

Mr Tay Kunming is a resident trainer at a local Gemological Institute. He is a certified diamond grader (2010) trained by the established HRD Antwerp Institute of Gemmology (Belgium), completed his diploma in gemology from the Gemological Association of Great Britain and is also a member of the Diamond Exchange of Singapore. He also travels around the region regularly to source for various gemstone specimens (for training purposes) and to update himself with trends and developments in the gemstone market.