

Corundum - Sapphire

The 'gem of the heavens', the name is derived from the Greek sappeiros meaning blue.



General Information

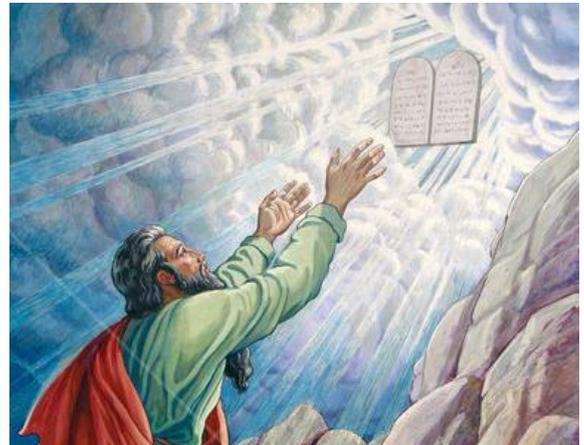
It is the birthstone for September and the anniversary gemstone for the 5th and 45th years of marriage. Sapphires are available in a wide range of colour except red. Sapphire in colours other than blue are called fancy sapphires. Colours variations include white, pink, yellow, peach, orange, brown, violet, and green. The most valuable sapphires have a medium intense, vivid blue, few visible inclusions and hold their brightness of colour under all different types of lighting. Any black, green, or grey overtones will reduce a stone's value.

The most valuable are genuine Kashmir stones, Burmese sapphires are valued almost as highly and then we have Ceylon (Sri-Lankan) sapphires.

Legend and Lore

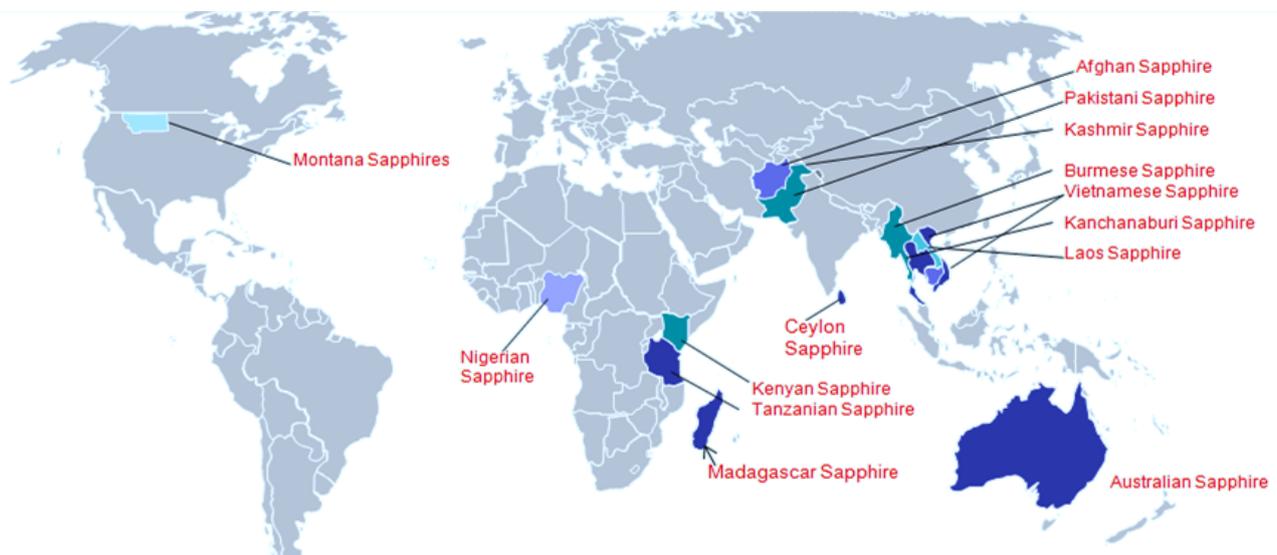
Sapphire has been cherished for thousands of years. The ancient Persians believed that the earth rested on a giant sapphire and its reflection coloured the sky. It has long symbolized faith, remembrance, and enduring commitment.

According to tradition, God gave Moses the Ten Commandments on tablets of sapphire, making it the most sacred stone. Therefore, sapphires often were the gem of choice for kings and high priests throughout history.



Location

Sapphires are found in India, Burma, Thailand, Sri Lanka, Vietnam, Australia, Brazil, Africa, the United States, China and Madagascar.





Physical Properties

Mineral Special:	A variety of the mineral corundum
Crystal Structure:	Hexagonal crystal system
Specific Gravity:	4.00
Hardness:	9
Refractive Index:	(DR)1.757 -1.779

Durability

Sapphire is a hard gemstone rated 9 on Mohs Scale of Hardness but like its sister stone ruby, tends to brittleness if dropped. The only harder natural gemstone is diamond.



Enhancement

Virtually all sapphires and rubies sold today are *heat-treated* to a high temperature to maximise intensity of colour and improve clarity. The resulting stones are completely stable in colour and this practise is accepted worldwide. Impurities may dissolve or become less noticeable after heating.

Modern methods of heating rough crystals started around 1920. Ovens could reach the required temperature of over 1500 ° C.

Synthetics and Simulants

Verneuil synthetic sapphires have been made since the early 19th century, but flux-grown and hydrothermal production is on a commercial scale. Blue sapphire may be simulated by natural blue spinel, iolite, tanzanite, garnet topped doublets, and blue glass.





Star Sapphires

Some sapphires contain unusual tiny needle-like inclusions and are cut in a cabochon shape to display a six-rayed white star. The quality of these stones is judged by the sharpness of the star, the evenness of the rays and the body colour. It is extremely rare to find a star-sapphire with a sharp star and a bright blue body colour.



Padparadscha Sapphires

This is a valuable fancy orange-pink sapphire named after the lotus blossom. They are very rare and sell at a premium.

