

# PADPARADSCHA: THE MOST DELICATELY COLORED CORUNDUM VARIETY

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Prominent corundum varieties ruby and blue sapphire have been the best known and celebrated gemstones for even longer than diamonds. Modern gem traders delight in the other colors of sapphires, from yellow to pink. Among these “fancy sapphires,” padparadscha, the delicate pure pink-orange variety, is the most popular and arguably the rarest.

The idealized description of padparadscha is an untreated sapphire from Sri Lanka displaying equal amounts of pink and orange, in light tones, without any brown modifier. The color has been romanticized as the “tropical sunset” or “a lotus blossom” in many texts, yet neither of these romantic descriptions provides a clear picture. Ruby and sapphire authority Richard Hughes describes the color as the mixture of sunset and lotus flower colors. He wrote a well-versed article on padparadscha description called “The Ownership of Words,” found on the Lotus Gemology website.

Traditionally, a true padparadscha sapphire is sourced from Sri Lanka, but modern discoveries from East African mines in Tanzania and Malawi producing similar colored sapphires have been accepted as new padparadscha localities. Padparadscha was very popular in the 1980s and 1990s. However, during the early 2000s, the undisclosed beryllium diffusion of Madagascan pink sapphires to produce padparadscha-like colors caused a significant but temporary loss of confidence in the market. This was most notable in Japan, which is a major retail market for fine padparadscha sapphires. Early detection in the United States



30.77-carat padparadscha sapphire mounted in 18-karat rose gold ring. Courtesy of Bonhams.



5.67-carat pear shape faceted padparadscha sapphire. Courtesy of Bonhams.



*2.58-carat padparadscha sapphire, diamond, and gold caterpillar brooch.  
Courtesy of Bonham's.*

allowed for the global rejection of beryllium diffusion, which helped the market recover from the price declines reported in Japan. Advanced gem testing methods helped restore global confidence, and Japan remains today the strongest buyer of fine padparadscha.

The increasing demand for untreated gemstones reflects on corundum varieties the most. While the market is more flexible toward a widened color description of padparadscha, it has become more accepting of heat treatment, too. There is no denying the Laboratory Manual Harmonization Committee (LMHC) has played a major role in this tolerant situation. The LMHC was formed to achieve the harmonization of gemological report language and is comprised of representatives from the major gemological laboratories located in Europe, the U.S., and Asia. LMHC Information Sheet #4 was published to clarify padparadscha description and report wording. Most recently updated in 2018, this report widens the color description, adds different locations, and includes heat treatment, unlike traditional criteria. LMHC information

sheets are easily found on its website.

Gemologists are well trained to identify natural versus synthetic sapphire and their imitations. The challenge is in the detection of treatments. While high temperature heat treatment is relatively easy to recognize via magnification, low temperature heat treatment and beryllium diffusion are very difficult to detect. In most cases, advanced laboratory techniques are required. Another recent issue in identification of padparadscha is color stability. Major laboratories, such as AGL and GIA, have released information on how tenebrescence in pink sapphire can lead to color definition as padparadscha rather than pink sapphire. This property causes temporary orange color transformation in pink sapphire when subjected to UV light and creates the desired pink-orange combination, but fades away in time. Most laboratories, such as AGL and GIA, perform color stability tests before issuing a report, but it is easily overlooked on smaller and less important stones as they would not be submitted to a lab. This is yet another testament to how important it is to keep up with the latest publications in gemological research. ♦

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