

## **TOURMALINE:**

## THE MINERAL THAT COMES IN EVERY IMAGINABLE COLOR.

he beauty of tourmaline is to an extent derived from its complexity. Tourmaline's chemical structure is one of the most complex of all minerals. Although not commonly acknowledged in gemology, tourmaline, as a mineral, has more than ten species. Gemology focuses on the colorful varieties in many cases, sometimes the phenomenal ones such as cat's eye and rarely color-change. Tourmaline has been known as a gemstone for millennia and associated with a number of cultural beliefs. Until the discovery of Paraiba tourmalines, it had been regarded as a "semi-precious" gem that was rarely seen in high-end jewelry. Decades later, the global gem market has come to really appreciate tourmaline. Indicolite, rubellite and, of course, Paraîba type varieties are to thank.

Discovery of vivid blue, green, and purple-to-violet tourmalines, a.k.a., "Paráiba" in Batalha, in Paraiba State Brazil in 1982 changed the way the gem market perceived tourmalines. The unquestionably vivid colors were due to copper and this color agent was not documented in tourmaline ever before. Fast forward two decades, the Paráiba tourmalines are still selling and at thousands of dollars per carat. In 2001, we witnessed another discovery of an almost identical material but in Mozambique, Africa. The debate over naming this exciting gem has yet to come to an end. Mozambique cuprian tourmaline is mined in much larger amounts compared to Paraîba and the price points are distinctly lower. However, since the two materials overlap mineralogically, origin determination has presented some challenges for the labs. Although it is accepted by the Laboratory Manual Harmonization Committee (LMHC), purists disagree that Mozambique cuprian tourmaline should be called Paráiba. After all, Paraiba is an origin name. The price points of African cuprian tourmalines are clearly lower than Paráiba, so why confuse the consumer? The prices for fine and extra fine Paráiba in true "Windex blue" colors can exceed by ten times or more that of the same category in Mozambique material.

The vivid purplish red tourmaline, rubellite, has also been one of the favorite tourmalines in the market in recent decades. Popularity of this color peaked early this decade on strong demand in the Chinese market, which some attribute to high prices for ruby. As



27.63ct. Tourmaline from Brazil. Courtesy of Pala International. Photo by Mia Dixon.





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an affordable alternative to ruby, rubellite still enjoys good demand. It is a popular stone, mainly due to its availability in large sizes. Today, however, prices for rubellite have returned to typical levels having moved well below their highs.

On a similar note, seafoam and mint colored tourmalines, the most popular of green category, demand the same price as rubellite. Despite their light colors, manufacturers apply fancy cutting styles to them to bring out the life in these stones. Strong pleochroism and large sizes play a distinct role in their popularity. In

addition to green, blue and red tourmaline, golden yellow, green-blue, cinnamon brown, pink and bi-color and tri-color tourmalines are seen.

Buyers need to be aware of a number of treatments on tourmalines. While most cuprian, green, bluegreen, and pink tourmalines are heat treated; rubellites are mostly irradiated. As a rule of thumb, all gems with surface reaching fissures and fractures have a great potential for clarity enhancement. Therefore, tourmalines are not immune to it. •

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