



Turquoise

is one of the world's most ancient gemstones. Archaeological excavations have revealed that Egyptian royalty wore turquoise jewelry as early as 5500 B.C. Chinese artisans were carving it more than 3,000 years ago. Native American tribes have worn turquoise as a ceremonial gem and adorned their jewelry and amulets with it for thousands of years. Yet this appealing bluish gem maintains its charm, even today, as a favored accessory worldwide. Celebrities including Cher, Jennifer Lopez, Macy Gray, Jennifer Love Hewitt, and Lenny Kravitz have all been spotted wearing this timeless jewel.

Turquoise most likely first arrived in Europe around the thirteenth century from Turkish sources. Deriving its name from the French expression *Pierre tourques*, or “Turkish stone,” turquoise is mined worldwide, including Egypt, China, and the U.S. Turquoise is the present-day December birthstone, and is designated as the 11th wedding anniversary gift.

The Egyptians believed that turquoise possessed magical properties in that it could thwart misfortune and heal a variety of ailments. The national gem of Tibet, turquoise has long been considered to bestow health and good luck. The Apaches thought that turquoise attached to a bow or firearm increased the accuracy of a hunter or warrior.

The gem's color ranges from light to medium blue or greenish-blue and is usually opaque. Turquoise is a copper-aluminum phosphate- the blue color created by copper, the green by iron and a certain amount of chrome.

Spider-web turquoise – a popular variation – displays veins of matrix (its host rock) in web-like patterns. Persian (Iranian) turquoise is considered the finest quality and also the most expensive, and it exhibits an intense light to medium blue, typically with no matrix. It has the ability to take on a glossy polish. Other turquoise varieties include American, Mexican, Egyptian, and Chinese are a significant source today.



Large turquoise stones are common; however the gem is also plentiful in a wide range of sizes, and is often used for beads, cabochons, carvings, and inlays. Trendy fashion designers have more recently sewn it into clothing and bejeweled purses with it. Turquoise's popularity has varied throughout time. Currently it is a hot item not only for Hollywood divas, but is also universally liked because of its commercial abundance. Its most enduring appeal remains in the American Southwest and among those who are captivated by that region's mystery and romance, as well as by its blue skies, reminiscent of turquoise's color.

Turquoise has relatively low hardness of 5 or 6 on the Moh's scale, it is typically enhanced before it reaches the market, and special care should be taken to maintain its vitality. For example, gem traders commonly impregnate the gem with plastic or wax to improve the color and durability, or dye it with liquid black shoe polish in a pattern imitating the matrix web. Avoid heat and acetone-like solvents (Never clean in an ultrasonic). Perspiration, skin oils, cosmetics, and other chemicals may turn a blue turquoise to green.





Tanzanite

is relatively new to the colored stone galaxy. This transparent blue gem first turned up in 1962, scattered on the Earth's surface in northern Tanzania, in eastern Africa.

Scientists identified it as a variety of the mineral zoisite. About five years later, a prospector discovered a large deposit of it in the same area, and serious mining began.

Tiffany & Company recognized its potential as an international seller and made a deal to become its main distributor. Tiffany named the gem after the country it came from and promoted it with a big publicity campaign in 1968. Almost overnight, tanzanite was popular with leading jewelry designers and other gem professionals, as well as with customers who had an eye for beautiful and unusual gems

Tanzanite's public recognition and popularity have grown steadily. But there have been wide fluctuations in the gem's supply and price level, due mostly to Tanzania's volatile political, social, and economic conditions. That country remains the gem's only source.



Tanzanites are heat-treated to produce colors that include light to dark violetish blue and bluish purple, as well as pure blue. Rich, deep hues are valued most, but you'll usually see these only in stones weighing 5 cts. or more. This is mainly because of decisions made during the cutting process. Tanzanite typically shows strong pleochroism, which means it displays different colors from different directions. It usually looks violetish blue from some directions, purplish from others.

Predominately blue tanzanite is generally worth more per carat, but because of the way tanzanite crystals grow, a cutter can usually get a bigger stone by orienting the gem to show the purple color. With small rough, size is normally the main consideration. While the trade considers the pure blue stones to be the "top" grade, some customers actually prefer the lighter and more purplish colors.

Tanzanite is special-care gem for two reasons: sensitivity to thermal shock and the potential for cleavage. Sometimes the temperature change between the hot lights of the display case and the chilly glass countertop in an air-conditioned showroom can be enough to develop cleavages in tanzanite.

Because of its susceptibility to cleavage, tanzanite shouldn't be handled carelessly. Active people should consider jewelry that won't be exposed to as many bumps — pendants and earrings are good choices.

Hardness & Toughness

Sudden changes in temperature may cause cracking in tanzanite. The gem is stable to light, and can be attacked by hydrochloric and hydrofluoric acid.

Treatments

Tanzanite is routinely heat treated to produce tanzanite color in transparent brownish material. This treatment is undetectable but is assumed because of its prevalence.

Care and Cleaning

Tanzanite should be cleaned using warm, soapy water. Ultrasonic cleaners and steam cleaners should never be used.

Imitations

Glass, synthetic corundum, synthetic spinel, and synthetic spinel triplets have all been used to imitate tanzanite.



Sources: Gemological Institute of America

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