

Natural Zircon

Beautiful gems plagued with a well-known name

What do you picture when you hear someone talk about their new zircon ring? The majority of people would probably picture something that looks a lot like a diamond ring. That is due to the popularity of synthetic cubic zirconia as a diamond substitute. In 1973 Soviet scientists perfected the growth of large synthetic cubic zirconia crystals and published their findings. In 1976 commercial production began and by 1980 over 50 million carats a year were being produced. The new synthetic was here to stay and its name became synonymous with fake. Unfortunately the new name for fake - *cubic zirconia* - looked and sounded a lot like the name for a much rarer natural gemstone known as *zircon*. To compound the problem, one of the most common substitutes for diamond prior to 1973 was natural colorless zircon. It is certainly understandable how people other than you or I could get confused!

So, now that we've weeded out all those who thought zircon was a synthetic stone, the odds are the rest of us envisioned a ring with a bright, beautiful blue gem. Blue zircon is relatively well-known now as the birthstone for December. Ironically, the name zircon probably derives from the Persian word *zargun* which actually translates as *gold-colored*. It turns out that zircon is available in a whole variety of colors including white, yellow, blue, green, brown and dark red. The reddish brown version was historically known as *hyacinth*.

24.02ct yellow zircon with diamonds and black onyx in 18KT gold \$5900

6.5mm blue zircon in white gold and silver mokume gane \$1600

3.54ct green zircon with Seymchan palasite meteorite and 18KT gold \$1800

Blue zircon in white gold and etched silver mokume gane shield ring \$2100

Zircon has a high refractive index and very high dispersion which give the gem its brilliant good looks. While the different colors of zircon all share the same mineral properties, there is actually a range of most properties. Zircon contains trace amounts of radioactive elements - most commonly

uranium and thorium. While not strong enough to harm humans, over time those elements gradually break down the crystal structure making it more of an amorphous solid, meaning the lack of any discernible crystal structure. In the mineral world, different terms are used to indicate the amount of alteration due to radiation. *High zircon* is used for those with the highest optical properties which are zircons with minimal alteration, *low zircon* for those with the lowest optical properties and *intermediate zircon* for those in between.

Small zircons are found worldwide and are ubiquitous in many types of rock. The fact that they contain trace amounts of uranium make them useful as indicators of the passage of geologic time. Only a small percentage of zircons are large enough and clean enough to be considered gemstones though.

The bright blue zircons that we are most familiar with are mostly heated from natural reddish-brown zircons. However, the heating process cannot increase the intensity of color so intense blues are much rarer and more expensive than pastel blues. In addition, stones from different localities take the heat treatment with different degrees of success. Cambodia is known as the premier source for blue.

Since zircon has strong double refraction, most zircons of gem size can be easily identified with the help of a microscope or jeweler's loupe. Facet junctions on the back of the stone will typically appear doubled when viewed through the table of the stone. While zircon is a reasonably hard stone of about 7 on the Mohs hardness scale, they seem to abrade more easily than many other gemstones making them suitable for pendants, earrings and special occasion rings.

Maybe now is finally the time for zircon to find a spotlight of its own.



Christmas Specials available now through 12/24

Personalized Watercast Jewelry

Sterling Silver
Regular \$250

\$75



Twig Earrings

Blue Zircon
18KT & Sterling
Regular \$450

\$249



Saturday, 12/21
Christmas Party!



Red Jasper Earrings

Sterling Silver
Regular \$275

\$149



All day December 21, make custom stamped pendants and earrings as gifts using our tools and with our help!

Size pictured is \$9 in sterling without chain.

All ages welcome with supervision.

No experience necessary.

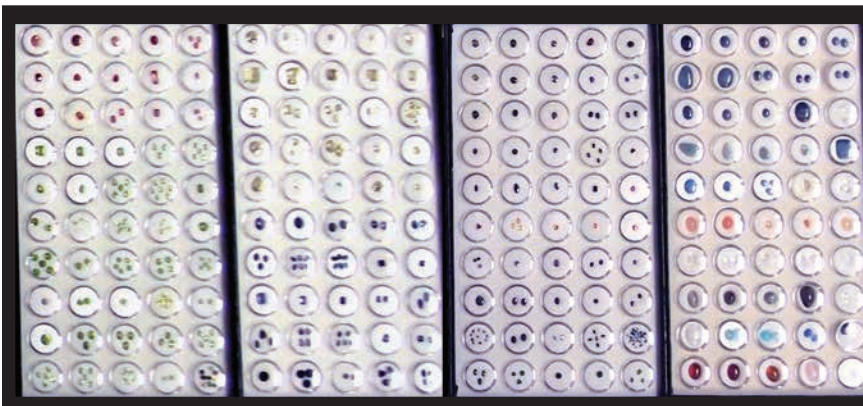
Spiral Gem Rings

Sterling Silver
Regular \$250

\$99



Loose Gemstone Auction



Everyone enjoyed last year's gemstone auction so we're having another!

Gems (both parcels and singles) will be available for viewing 1/11

Silent auction 1/18 to 1/25