

## Amethyst

**This royal gemstone is both beautiful and affordable!**

I still have faint memories of my first trip collecting amethyst in Ontario. I remember riding in the back of our big old Buick on a gravel road through the forest. We all held our breath as it bounced through the water-filled potholes, hoping we would be able to turn around and make it back out! I remember arriving at the mine and, though the trees, catching our first sight of the acres of purple rocks sparkling in the sunlight. We pored over those rocks for hours, each of us allowed to take home one ice cream bucket full. At least that's the way I remember it! That mine is known as the Panorama Amethyst Mine, and is still in operation today, providing landscape stone and loads of fun for rockhounds.

The majority of gem grade amethyst is mined in an area straddling the south part of Brazil and northern Uruguay. There, the amethyst occurs in crystal lined cavities known as geodes. It is believed that the largest amethyst-lined cavity was discovered in 1900 in Rio Grande do Sul. That cavity measured 33 by 16 by 10 feet and weighed an estimated eight tons. A piece of that fantastic specimen is preserved at the Smithsonian Museum in Washington, D. C.

Amethyst is a member of the quartz family of gemstones, which also includes yellow citrine, green prasiolite, smoky quartz, rose quartz and rock crystal. All of these gems are crystals of silicon dioxide and are only separated by color. When the crystals are microscopic in size, a whole different set of gemstone can be added. Microcrystalline quartzes include chalcedony, jasper, agate, bloodstone, tigereye and black

onyx. Silicon dioxide is an abundant mineral on earth with sand being composed almost entirely of quartz and jaspers.

The fantastic purple color of amethyst is caused by the inclusion of iron ions at the molecular level. Heating amethyst can change the color to yellow citrine or green prasiolite depending on the state of the iron ion. The amount of heat required is not high - typically only 250-400 degrees - so treatment is usually impossible to detect. If citrine or prasiolite are treated with irradiation, the process can be reversed creating purple amethyst.

There is one mine in Bolivia, the Anahi Mine, which produces a mix of amethyst and citrine known as ametrine. In that mine, 10-30cm long crystals occur in veins within a dolomitic limestone. This is the only mine currently producing ametrine, although there is synthetic ametrine available on the market.

Amethyst has been known and used for adornment since ancient times. While the most well known myths revolve around cures for intoxication, amethyst was also used to protect against snakebite, quell excessive stomach acid, beautify the skin, and even combat insect bites. In Greek mythology, a young nymph named Amethystos was being pursued by Dionysis. In her distress, she called out to Artemis for help. Apparently the obvious solution back then was to turn her into stone. When Dionysis saw what happened, he felt remorse and his tears turned the statue purple.

Quartz is seven in hardness so amethyst is a fairly durable stone and can be used in all types of jewelry. With its rich, distinctive color and affordable price, amethyst makes a great addition to any wardrobe.

**1.21ct amethyst and  
0.21ctw diamonds in  
18KT ring \$1250**

**Amethyst in PMC fine  
silver medallion \$500**

**Amethyst in ham-  
mered 14KT gold  
earrings \$990**

**Amethyst in 14KT  
gold ring \$790**

