

Why are **agates** so special?

The stone itself is distinguished by impressive shades of natural colors and contrast in the band patterns it contains. The characteristic band patterns—which begin at the center of the rock and move outwards like the rings on a tree—are visually dynamic.

Why do agates have lines?

Since each layer of silica gel comes from a different time period, they have different mineral compositions and impurities. This is the reason that agates are banded. One of the most common structures is alternating layers of chalcedony and crystalline quartz.

Is agate metamorphic or igneous?

The agate gemstone is not a sedimentary rock, nor is it metamorphic or igneous. In fact, it isn't categorizable as any one of the three geologic rock types.

What makes an agate an agate?

Agate is a gemstone used in different pieces of decoration and jewelry. It's made of silica and chalcedony. (/kæl'sɛdəni, 'kælsədouni/)

Agate is a Type of Chalcedony, a white, buff, or light tan, finely crystallized or fibrous quartz that forms rounded crusts, rinds, or stalactites (*mineral deposits suspended from the roofs of caverns*) in volcanic and sedimentary rocks as a precipitate from moving solutions. It is cryptocrystalline form of silica, composed of very fine intergrowths of quartz

Formula: SiO₂

Colour: colorless, white, gray, blue, any color due to embedded minerals, multicolored specimen not uncommon.

Lustre: Waxy, Dull

Hardness: 6½ – 7

Specific Gravity: 2.6g/cm³

A variety of Quartz: Crystal Structure: Amorphous (none) molecule arrangement

Geological Setting:

Very common.

- As nodules, vein fillings, crusts in volcanic rocks.
- As sinter-like, gel like, crusts in low- to medium temperature hydrothermal veins.
- Main constituent in silica-rich marine sedimentary rocks.

The agate crystal is a microcrystalline-quartz mineraloid that has a lustrous display of multi-color banding and results from long-term accumulations of siliceous groundwater deposits in rock cavities. Much like other mineraloids, all agate types form over thousands of years inside the existing voids of other igneous, sedimentary, and metamorphic rocks that contain silica-rich groundwater. And color formations and patterns can vary depending on numerous

environmental factors. In fact, the layering and banding typically visible within an agate gemstone is representative of the shapes of the voids from which it develops.

Agate History

Agate has been used as a gemstone for as long as man has made jewelry and in antiquity it was quite highly valued. It was the first gemstone ever written down in an ancient document and at least 3500 years ago Egyptians procured colorful agates from the Achatas River on the Mediterranean island of Sicily (from which the modern name 'agate' comes from). Consequently the tombs of ancient Egyptian royalty are littered with agate ornaments and jewelry. Not far from Sicily is the Greek island of Crete where archaeological digs in Knossos have discovered agate carvings dating back to the Bronze Age. People in Idar-Oberstein in Germany have been cutting and polishing locally mined agates for well over 500 years and documents suggest mining has been undertaken there for around 3000 years. It was here that the first cases of high quality dyed agates were discovered, although dyeing agate has been going on for thousands of years it was not to such a high standard. When the local mines were exhausted, German immigrants in Brazil found huge resources of plain white agate which was sent back to Germany to be dyed to continue a very profitable industry.

As the world was opened up to new explorers more and more types of agate were discovered. Blue Lace Agate is an attractive gemstone. This agate was first discovered in the early 1960's by George Swanson, in the southwestern African region of the Kalahari Desert of Namibia and was soon a darling of the gem world. Botswana Agate is a beautiful white and purple or peach striped agate discovered in this southern African country while Fire Agate is only found in the western parts of North America and was discovered as recently as the 1950s.

What are the Different Types of Agate?

1. Onyx Agate.
2. Fire Agate.
3. Moss Agate.
4. Crazy Lace Agate.
5. Blue Lace Agate.
6. Blue Agate.
7. Iris Agate.
8. Ellensburg Blue
9. Dendritic
10. Fortification
11. Lake Superior
12. Enhydro
13. Plume
14. Thunder Eggs solid filled
15. Geode

There will probably be no comprehensive list of all possible names for Agate, because old names number in the hundreds

and new names are coined frequently, mostly with no involvement by scientists who go through the rigors of properly classifying the rocks. Some variety names are generally used by collectors and dealers, but there are many made up by dealers to describe a locality or other habit.

Uses in industry and art

Industrial uses of agate exploit its hardness, ability to retain a highly polished surface finish and resistance to chemical attack. It has traditionally been used to make knife-edge bearings for laboratory balances and precision pendulums, and sometimes to make mortars and pestles to crush and mix chemicals. It has also been used for centuries for leather burnishing tools.

Agates have long been used in arts and crafts. The sanctuary of a Presbyterian church in Yachats, Oregon, has six windows with panes made of agates collected from the local beaches.[18] Respiratory diseases such as silicosis and higher incidence of tuberculosis among workers involved in the agate industry have been reported from India and China. Ancient works also had these respiratory diseases. Caution in working silica stones.

Decorative arts use it to make ornaments such as pins, brooches or other types of jewellery, paper knives, inkstands, marbles and seals. Agate is also still used today for decorative displays, cabochons, beads, carvings and Intarsia art as well as face-polished and tumble-polished specimens of varying size and origin.

Jewelry and gem stones can value to \$3000

Agate is a popular and highly marketable stone amongst gem enthusiasts worldwide. This is mostly due to its colorful displays, mystifying geological origins, and its spiritual and cultural affiliations.

What are the properties of agate? Energy revival

It transforms negative energy into positive energy. It enhances mental function, improves concentration, enhances perception and analytical abilities. It is a soothing and calming gemstone that heals inner anger, anxiety and helps in the strengthening of relationships.

BLUE LACE AGATE

This variety of agate has a light blue hue that is soothing and allows you to be in balance. Usually, this variety of agate has stripes that resemble lace. The stone affects the throat chakra, which is responsible for your ability to express your thoughts freely. One of the healing properties of blue lace agate is throat healing.

RED AGATE

Red agate is said to strengthen the will and make a person more purposeful. It also cleanses the aura of negative energy and fills it with positivity. Red agate has long been known for its ability to help overcome difficulties in love relationships.

MOSS AGATE

This white or beige stone has green patterns that resemble plants, especially moss. Moss agate helps to harmonize the inner state, balancing masculine and feminine energies. Suitable for people who experience frequent mood swings. The stone affects the heart chakra, removing blockages from it, allowing you to be less controlling and critical of others. Moss agate also boosts self-esteem and has a very calming energy, reminding you of nature. Native Americans used moss agate as a stone of strength

DENDRITIC AGATE (“Stone of Plenty”.)

The color of the mineral is brown or green with inclusions reminiscent of a fern. The stone helps you stay emotionally focused and strong when faced with potential struggle or hostility. It helps you find peace.

Favorite agate places

Fraser River
Haida Gwaii North Beach
Thompson Plateau
Oregon Beaches
Barstow California to Quartzsite Az
Oregon ranch fields, Ellensburg Wash, Lake Superior