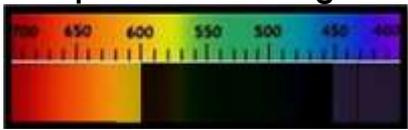


Warning: this version has been completed with Google Translate , it certainly contains errors or inaccuracies.

Technical sheet - general: **Red beryl**

Gemma - names	(Italian – Berillo Rosso) (English - Red Beryl) (French - Béryl rouge) (Spanish - Berilo rojo) (Portuguese - Berilo vermelho) (Russian - Красный Берилл Krasnyy Berill)	(German - Roter Beryll) (Arabic - الأحمر البريل al'ahmar) (Thai - เบริลแดง beril daeng) (Mandarin - 红绿柱石 hó ng lù zh ù sh í) (Swahili - Beryl nyekundu) (Hindi - लाल बेरिल laal beril)	photo 
Colors (GIA)	Red beryl can come in various hues like strawberry , bright ruby , deep pink , raspberry pink , and cherry red orange . The best faceted red beryls have a raspberry pink to slightly purplish red color and are lightly included (very difficult combination).		
Cause of Color	The gem gets its red color from manganese ions (Mn³⁺) in octahedral coordination , embedded within aluminum cyclosilicate and beryllium crystals. The color of red beryl is stable up to 1000 degrees. Allochromatic gem		
Classification	Mineral class Cyclosilicates	Species - Group (mineral) Beryl - /	Variety Red beryl
Optical properties	Specific Gravity: 2.66-2.70 Municipality: 2.68	RI: 1,567-1,568 or 1,568-1,572; Polariscope : DR Double refraction: 0.004 to 0.009	Character optical Negative uniaxial
	Luster (luster) - luster of the fracture Vitreo - vitreous		Pleochroism Purplish red / red-orange
Light	Fluorescence SWUV : Inert LWUV : Inert		Dispersion (fire) 0.014
Form	Crystalline dress Small prismatic to thick tabular crystals.	Phenomenal optical effects Attitude (not ascertained)	Phosphorescence NO
Chemical formula	Beryllium silicate, aluminum		Spectrometer image  Increasing absorption below 400 nm (Fe3+), weak peak at about 430 nm (Fe3+) and intense absorption region from 450 to 600 nm
	Be₃Al₂Si₆O₁₈ with a mix of Mn ³⁺ ions		
Fracture	Flaking Indistinct	Breaking- Parting Rare	Fracture Concoidal to irregular
Durability	Hardness (Mohs) - Absolute 7.5-8; 150 - 200	Toughness Fragile	Stability (heat, light, chemicals) Fragile
Clarity - characteristics	Typical inclusions: Long and hollow tubes, negative crystals, chrysanthemums. Fractures healed and not, growth bands. The solid inclusions are quartz, potassium feldspar (adularia), bixbyite and hematite. "Fingerprints" made from numerous fluid inclusions and biphasic inclusions.		
	Type III Always included	Transparency (commercial) - transparency Transparent (included)	



Deposits - types of rocks	<p>While most beryl-gems are found in pegmatites or some metamorphic rocks, red beryl forms in topaz-containing rhyolites , crystallizing at low pressure and high temperature from a pneumatolytic phase along fractures or within nearby miarolytic cavities. to the rhyolite surface. The minerals associated with it are bixbyite , quartz, orthoclase, topaz, spessartine, pseudobrookite and hematite .</p> <p>Age : 22 million years old.</p>
Characteristics of rough stones	<p>Crystals are prismatic hexagons with flat, streak-free terminations. Relatively low hardness and specific gravity. Red.</p>
Main deposits	<p>Red beryl is very rare and has only been reported in a handful of locations: Wah Wah Mountains, Paramount Canyon, Round Mountain, and Juab County in the United States. Currently, according to several sources, there is no commercial production of gem quality red beryl.</p> <p>USA - New Mexico (Sierra County) , Utah (Beaver County, Juab County) .</p>
Year of discovery	<p>1904: Red beryl was discovered in 1904 by Maynard Bixby in the Wah Mountains Wah in Utah.</p>
History	<p>In 1912 the gem was named bixbite by Alfred Eppler in honor of Maynard Bixby . The old synonym "bixbite" is deprecated, as it can cause confusion with the mineral bixbyite . According to the Gemmological Association of Great Britain, in 1958, many years after the first discovery of Bixby , another prospector, Mr Lamar Hodges, found a second deposit of red beryl in what became known as the "Ruby Violet" mine in the Wah Mountains. Wah from west-central Utah (USA). According to an article by the Gemological Institute of America, only about 60,000 carats had been mined by 2003 . In a 1999 article that appeared in <i>Professional Jeweler</i> , the similarities between red beryl and emerald were listed, including formation similarities, color zoning patterns, facet considerations, and more.</p> <p>In the most recent update of its Jewelry Guides in 2018, the United States Federal Trade Commission created a section on gemstone variety names. On that occasion, The American Gem Trade Association observed that the use of "red beryl / emerald" or "red emerald / beryl" in presentation or sale was not misleading. Eventually, he was simply advised not to "use wrong variety names".</p> <p>Most of the commercial demand for red beryl comes from Japan , with demand growing from Asian countries in general . There is also a strong interest from mineral collectors , attracted not only by the color but also by the hexagonal shape of the crystal of a well formed raw red beryl.</p> <p>Name: In 1912 the gem was named bixbite by Alfred Eppler in honor of Maynard Bixby . The old synonym "bixbite" is deprecated, as it can cause confusion with the mineral bixbyite (a name that was dedicated to the geologist himself).</p> <p>Other Trade Names: Formerly known as bixbite, also called red emerald or scarlet emerald ,</p> <p>Variety: /</p>
Property attributed	<p>Red beryl is a rather little known stone, given its rarity In the world of crystal therapy it is believed that this gem can help get rid of any kind of unnecessary mental baggage. Increase courage, calm the mind and relieve stress, filtering out distractions so you can also reduce over-stimulation.</p> <p>It facilitates connection with your divine guidance regarding important decisions in your life. Red beryl means purity of being, like pyrite, and can push you to realize your potential and have a positive view of the world and life. Some believe it can be used for ritual magic, as well as magical operations and divination, promoting purity and strength of being and inspiring one to take initiative in all aspects of life.</p> <p>Red beryl can help the organs of elimination function properly . It can strengthen the circulatory and pulmonary system , resistance to pollutants and toxins. It can help in treating ailments that affect the spine, liver, stomach, and heart . It is also said to have the power to awaken love when it gets tired.</p> <p>It uses the energy of fire, the energy of enthusiasm, heat, brightness, illumination and activity. It is Yang in nature . It is traditionally associated with the southern area of a house or room and the area of fame and reputation of your home. Red gemstones should be used sparingly, to bring the power of the sun and the energy of the fire element into your space.</p> <p>Planet: /</p> <p>Month: November Zodiac sign: Taurus</p> <p>Chakra: Heart</p>

Treatments	Filling of fracture / cavity (infrequent)			
Synthetic counterpart	Synthetic red beryl, produced in Russia, has entered the gemstone and jewelry market since the mid-1990s. However, these gems created in the laboratory with the hydrothermal system have some properties that distinguish them from natural materials. There are faceted stones of different carats (already the large size should be indicative of the synthetic origin of the gem)			
It can be confused with	This gem is known to be confused with pezzottaite , (Madagascar and Afghanistan; the cut gems of the two varieties can be distinguished by their difference in refractive index. Like emerald and unlike most other varieties of beryl, beryl red is usually highly included Morganite , a less intense pink, is often devoid of inclusions and relatively large in size.			
Indicative gemological tests	There are few gems of a certain size. Thorough tests for these stones are necessary, given their rarity and value. The combination of standard tests can lead (also through visual evaluation) to correct identification, but for a safe evaluation it is advisable to rely on a specialized laboratory.			
Value (2021)	<table border="1"> <tr> <td>High : 10,000 / 30,000 \$ / ct 1 carat +</td> <td>Medium: 5,000 / 1,0000 \$ / ct 0.5-1 carat</td> <td>Low: \$ 1000 / ct Melee cut</td> </tr> </table>	High : 10,000 / 30,000 \$ / ct 1 carat +	Medium: 5,000 / 1,0000 \$ / ct 0.5-1 carat	Low: \$ 1000 / ct Melee cut
High : 10,000 / 30,000 \$ / ct 1 carat +	Medium: 5,000 / 1,0000 \$ / ct 0.5-1 carat	Low: \$ 1000 / ct Melee cut		
	Red beryl is said to be roughly the same price or more valuable than emerald although it is a hundred times rarer. Its rarity has made it less popular, but red beryl crystals that exceed 1 carat can sell for \$ 20,000.			
Typical cut	<p>Only 5-10% of the few gems extracted are of gem quality.</p> <p>Most of the well crystallized red beryls end up in the mineral collections of some affluent amateurs rather than in jewelry. The few specimens on the market are set in protective frames, especially if worn as ring stones.</p> <p>When faceted, the cut chosen is designed to save most of the weight and therefore the value of the stone. Lapidary masters try to produce finished gems that are as large as possible. As a result, many of these stones have "windows" (areas of light loss, with dark areas, especially in the center of the stones) and poor proportions.</p>			
Famous stones	There are no famous gems of this type.			
Record stones	<p>The largest crystal ever found, known to exist, weighs 54 carats .</p> <p>According to the <i>Utah Geological Survey</i> , there is one red beryl for every 150,000 diamonds on the market. According to the Gemmological Association of Great Britain, a 2-carat red beryl has the same rarity as a 40-carat diamond. Less than 10,000 stones are cut annually, of which over 95% are small accent stones (a few points of a carat) and mostly low grade. There is unconfirmed news that the largest red beryl crystals may be about 2cm wide and 5cm long, but it is certain that most gem quality crystals are less than 1cm long and most stones of faceted beryl are 0.25 carats or less (according to some sellers, the average size is about 0.08 carats).</p>			