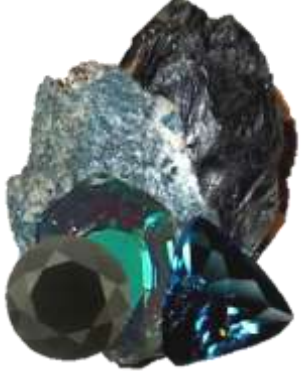
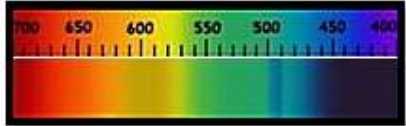



Warning: this version was completed with Google Translate, it certainly contains errors or inaccuracies.

Technical data sheet – general: Serendibite

Gemma – names	(Italian - Serendibite) (English - Serendibite) (French - Serendibite) (Spanish - Serendibita) (Portuguese - Serendibita) (Thai - เซอร์เรนดิไบต์ (serrendibiit))	(German - Serendibit) (Arabic - سرنديبايت (serendibit)) (Russian - Серендибит (serendibit)) (Mandarin - 瑟兰迪碧 (sèlándìbì)) (Swahili - Serendibite) (Hindi - सेरेडिबाइट (serendibite))	photo 
Colors (GIA)	Serendibite is a rare gemstone that occurs in a variety of colors, including: emerald green, olive green, bluish green, sapphire blue, cerulean blue, blue-green-gray to deep blue, brown or black ; in transmitted light, almost colorless or a light green-yellow or pale blue . The most sought after colors are emerald green and sapphire blue .		
Cause of Color	Serendibite is a rare gemstone that occurs in a variety of colors, including: Green: emerald green, olive green, bluish green. sapphire blue, cerulean blue, lemon yellow, golden yellow, pale pink, intense pink, but also black, brown and, in transmitted light, almost colorless or yellow-green or pale blue. The most sought after colors are emerald green and sapphire blue . Allochromatic Gem - Idiochromatic		
Classification	Mineral class Silicates	Species – Group (mineral) Serendipidite - Amphiboles	Variety /
Optical properties	Specific Gravity: 3.42 - 3.52 Municipality: 3.47	RI: 1,697 - 1,706 Polariscope : DR Birefringence: 0.001-0.005	Character optical Positive or negative biaxial
	Luster (luster) – luster of the fracture Vitreous - vitreous		Pleochroism Strong trichroism : green, blue, yellow, light blue, blue-green, light yellow
Light	Fluorescence SWUV (254 nm) : Absent LWUV (365nm) : Absent		Dispersion (fire) Absent
Form	Crystalline dress Tabular/Granular Melting point: 1500+ °C (estimated)	Phenomenal optical effects None known	Crystalline system Tricline Crystal class
Chemical formula	$\text{Ca}_4 [\text{Mg}_6 \text{Al}_6] \text{O}_4 [\text{Si}_6 \text{B}_3 \text{Al}_3 \text{O}_{36}]$ OR $(\text{Ca}, \text{Na})_2 (\text{Mg}, \text{Fe}^{2+})_3 (\text{Al}, \text{Fe}^{3+})_3 [\text{O}_2 (\text{Si}, \text{Al}, \text{B})_6 \text{O}_{18}]$		Spectrometer image  Wide absorption band below 490 nm
Fracture	Flaking Absent	Breakup- Parting Lamellar or polythetic (frequent)	Fracture Conchoidal- Sub-conchoidal, irregular
Durability	Hardness (Mohs) - Absolute 6.5-7; 86 - 100	Toughness Good	Stability (heat, light, chemicals) Good (suffers acids)

<p>Clarity - characteristics</p>	<p>Typical Inclusions: Typical impurities found in serendibite may include various mineral inclusions, such as needle crystals of other minerals, fractures, and in some cases, liquid-filled cavities or veils. The specific types and quantities of inclusions may vary from one serendibite sample to another.</p>		
	<p>Type II (estimated) Normally included</p>	<p>Transparency (commercial) - diaphanité From transparent to translucent</p>	
<p>Deposits - types of rocks</p>	<p>The mineral occurs in skarn associated with boron metasomatism and along the contact between carbonate rocks and granite, tonalite or granulite. Other minerals found with serendibite include diopside, spinel, phlogopite, scapolite, calcite, tremolite, apatite, grandidierite, sinhalite, hyalophane, uvite, pargasite, clinozoisite, forsterite, and graphite . Geological age : Possibly over 200 million years</p>		
<p>Characteristics of rough stones</p>	<p>Raw Serendipidite stones are usually irregular in shape, often with rough or fractured surfaces. The color can range from blue-gray to green, and the hue can change within the stone.</p>		
<p>Main depots</p>	<p>Notable deposits: Sri Lanka: Gangapitiya, near Ambakotte, Myanmar : Mogok USA : near Johnsbury, Warren County, Amity, near Warwick, Orange County, and Russell, St. Lawrence County, New York; and in the New City Quarry, 3 km south of Riverside, Riverside County, California, Canada : Melville Peninsula, Northwest Territories, Russia : Tayozhnoye Iron Deposit, Tanzania : 550 km south of Yakutsk, Yakutia , from the Handeni area, Madagascar : lanapera and lhosy .</p>		
<p>Year of discovery</p>	<p>1902: Serendibite was discovered at Gangapitiya, near Ambakotte, Sri Lanka, in 1902 (or 1903 according to other sources) by GT Prior and AK Coomaraswamy. Prior and Coomaraswamy called the mineral 'serendibite,' an ancient Arabic term for Sri Lanka.</p>		
<p>History</p>	<p>An emerald-cut serendibite gemstone, with a distinctive blue-green color, was identified as gemological quality by the GIA laboratory in Santa Monica, California, USA, with the identification number 10035658, in January 1997 . This precious crystal was only 0.35 carats and measured 4.42 x 3.80 x 2.80 mm. This find represents the first cut serendibite recorded in gemological literature. Prior to the discovery of serendibite in Mogok, Myanmar, in 2005 , only 3 cut specimens were known from the original discovery in Sri Lanka. Serendibite from Sri Lanka and Myanmar is considered the only source of material suitable for cutting. Serendibite from Sri Lanka had an attractive blue-green or violet color, while stones from Myanmar are dark black. In the second half of the 1990s , serendibite of gemological quality was discovered in secondary deposits in the Ratnapura area of Sri Lanka. Name : It was named in honor of the old Arabic name of Sri Lanka, Serendib. Other trade names: Bluestones of this species may sometimes be referred to as "Blue Serendibite" or "Sri Lanka Serendibite." Varieties : It is not common to associate specific varieties with Serendibite, but they are often identified by color or location of origin, for example "Blue Serendibite" or "Sri Lankan Serendibite"</p>		
<p>Attributed properties</p>	<p>Serendibite is a gemstone appreciated throughout the world for its reassuring and peaceful presence, which brings peace to the mind and soul. This stone is believed to promote the flow of positivity in the life of its owner, paving the way for optimistic events through introspection and reason. Serendibite can also help heal or eliminate afflictions that may have affected the individual. From a metaphysical point of view, Serendibite brings positive energy and awareness . This stone promotes thoughtful and meaningful decisions in the individual's life, improving their consciousness and decision-making skills. Furthermore, Serendibite can facilitate learning and the acquisition of knowledge, promoting a clear mind free from negative thoughts. Serendibite also offers physical benefits, protecting against negative influences and facilitating the healing of physical wounds and illnesses. It is particularly beneficial for students , as it enhances the conscious mind, improving understanding and memorization . Furthermore, it can help adults find direction in choosing a suitable career, enhancing personality and pointing the way to success.</p>		

	<p>From a spiritual point of view, Serendibite reduces stress and brings good luck into the individual's life. Serendibite is associated with the zodiac signs of Scorpio and Pisces and can be used in Feng Shui to attract positive energies.</p> <p>In Feng Shui, Serendibite can be of great benefit. Simply keeping this gemstone inside your home ensures an endless flow of positive energies. It is best to place this stone in the study area or office area inside the house.</p> <p>Planet: Not known Month: Not known Zodiac sign: Scorpio, Pisces Chakras: Solar Plexus, Heart and Third Eye</p>		
Treatments	<p>At this time, there are no specific treatments known to improve or modify Serendipiditis. This gemstone is generally prized for its natural beauty and is not subject to common treatments such as heating or irradiation, which are typical in other gemstones.</p>		
Synthetic counterpart	<p>There are no known synthetic versions of Serendipidite. This stone is very rare in its natural form, making it highly desirable among collectors and gem lovers. The lack of availability of synthetic versions contributes to its authenticity and value.</p>		
May be confused with	<p>It can be confused with sapphirine and zoisite , but they can be identified as serendibite based on refractive indices, gemination, and spectroscopic characteristics. Sometimes, the optical properties and specific density of serendibite and zoisite can completely overlap. The color of chrome and chrome-based Tanzanian zoisite is quite similar to serendibite. A distinction can be made based on the lamellar or polythetic gemmation of serendibite samples of gemological and non-gemological quality from different localities. The distinction from low-grade sapphirina and serendibite can be made by careful measurement of refractive indices, with sapphirina having a higher refractive index of 1,700. High iron contents in serendibite can cause misleading refractive index readings and may require additional gemological examinations such as spectroscopy and microscopy.</p> <p>A complete examination of all gemological characteristics is necessary to make a safe separation.</p>		
Indicative gemological tests	<p>The identification of Serendipidite and its distinction from similar gems involves key gemological tests. Hardness, refractive index, birefringence and pleochroism are evaluated to determine authenticity. Observation of inclusions and fluorescence under UV provide further clues. The results are compared to known reference data to confirm the identification. These primary tests are essential to ensure the correct identification of Serendipidite, but consulting an expert gemologist is always advisable for definitive confirmation.</p>		
Value (2021)	High : 20,000+ \$/ct 3 carats+	Medium: \$8,000/ct 1-3 carats	Low: \$500/ct under the carat
Typical cut	<p>Given the cost and rarity of this gem, a type of processing is normally applied that maximizes the color and reduces the waste of precious material, consequently it does not follow calibrated cuts, but rather particular faceting styles.</p>		
Famous stones	<p>There are no particularly well-known specimens.</p>		
Record stones	<p>According to Guinness World Records, The largest cut specimen of serendibite weighs 140.76 carats (28.15 grams) and is owned by Medici Collection, LLC (USA), as verified on March 9, 2020. The most large cut serendibite specimen weighs 140.76 carats (28.15 grams) and is the property of Medici Collection, LLC (USA), as verified on March 9, 2020. One of the famous stones is a deep green serendibite crystal weighing 13.8 carats. This crystal sold at auction for \$1.5 million in 2016.</p> <p>Another famous stone is a deep blue serendibite crystal weighing 10.2 carats. This crystal sold at auction for \$1.2 million in 2015.</p> <p>In addition to the two famous stones mentioned, there are other famous serendibite stones. For example, a deep green serendibite crystal weighing 10 carats sold at auction for \$1 million in 2014. Another deep blue serendibite crystal weighing 8 carats was sold at auction for \$800,000 in 2013.</p>		