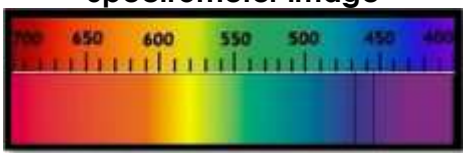
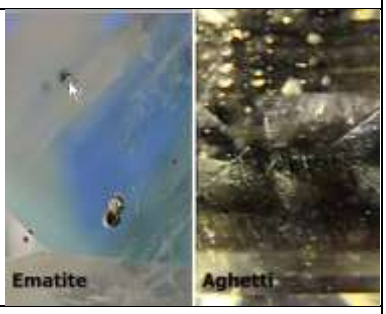
Warning: this version has been completed with Google Translate , it certainly contains errors or inaccuracies.

Technical sheet - general: Euclasio

<table>
<tr><td>Gemma - names</td><td colspan="2">(Italian - Euclasio)
(English - Euclase)
(French - Euclase)
(Spanish - Euclasa)
(Portuguese - Euclase)
(Thai - ยู คลี ส Y ū khl ī s ¯)</td><td>(German - Euklas)
(Arabic - يوكلاز yuklaz)
(Russian - Евклаз Yevklaz)
(Mandarin -欧克拉斯 Ōu kèlā sī)
(Swahili - Euclase)
(Hindi - यूक्लेसियो yooklesiyo)</td><td colspan="2">photo
  </td></tr>
<tr><td>Colors (GIA)</td><td colspan="4">Crystals most commonly occur in small sizes. Most of these gems are colorless. Strongly colored material is very rare. Purple is the rarest and most desired color .
Colorless, white , pale green to deep yellowish green , greenish blue , pale blue to deep blue .</td></tr>
<tr><td>Cause of Color</td><td colspan="5">Blue: Charge transfer Fe $^{2+}$ - O-Fe $^{3+}$. Green Cr $^{3+}$ in octahedral coordination. Gübelin (1978) reported that the colorless parts of the crystals contain 0.06% FeO and the dark blue parts contain 0.12% FeO and concluded that trivalent iron is the cause of the blue color.
Allochromatic Gem</td></tr>
<tr><td>Classification</td><td colspan="2">Mineral class
Nesosilicates</td><td colspan="2">Species - Group (mineral)
Euclasio</td><td>Variety
-</td></tr>
<tr><td rowspan="2">Optical properties</td><td>Specific Gravity:
2.99 - 3.13
Common: 3.06</td><td colspan="2">RI: 1,652-1,671
Polariscope : DR
Double refraction: - 0 .019 (0.024)</td><td>Character optical
Positive biaxial</td><td>Pleochroism
Light colors: bluish gray / light blue / colorless;
yellow-green / blue-green / colorless; white-green / yellow-green / blue-green .
Dark blue (Zimbabwe): azure blue / Prussian blue / greenish blue.
Chrome color: purple / blue-green / colorless.</td></tr>
<tr><td colspan="3">Luster (luster) - luster of the fracture
Vitreous - vitreous</td><td>Dispersion (fire)
0.016</td></tr>
<tr><td>Light</td><td colspan="3">Fluorescence
SWUV (254 nm) : Inert
LWUV (365nm) : Dark red (weak-inert)</td><td colspan="2">Phosphorescence
NO</td></tr>
<tr><td>Form</td><td>Crystalline dress
Prismatic, transparent and colorless crystals
Melting point: 1 ° C</td><td colspan="2">Phenomenal optical effects
Attitude
Asterism</td><td colspan="2">Crystalline system
Monoclinic
Prismatic
Crystal class</td></tr>
<tr><td>Chemical formula</td><td colspan="3">Beryllium aluminum hydroxy silicate
BeAlSiO $_4$ (OH)</td><td colspan="2">Spectrometer image
 
There are two vague bands at 468 and 455; if Cr is present, it can display a characteristic spectrum in red with a double line around 705.</td></tr>
<tr><td>Fracture</td><td>Flaking
Perfect (1 direction), imperfect (1 direction)</td><td colspan="2">Breaking- Parting
NO</td><td colspan="2">Fracture
Concoidal</td></tr>
<tr><td>Durability</td><td>Hardness (Mohs) - Absolute
(6.5-) 7.5; (86-) 150</td><td colspan="2">Toughness
Fragile</td><td colspan="2">Stability (heat, light, chemicals)
Good (suffers from blows due to perfect flaking)</td></tr>
</table>

	Certain euclase stones can have variable hardness even within the same crystal.		
Clarity - characteristics	**Typical Inclusions:** Minute inclusions consist of various clusters, not previously described for this mineral, of **hexagonal apatite crystals** , corroded and irregular plates of **hematite** , minute **rutile needles** and rounded grains of **zircon** . 		
	Type I. Typically free of inclusions	**Transparency (commercial) - transparency** Transparent to translucent	
Deposits - types of rocks	Euclasium is found especially in granite pegmatites. Usually, this rare stone is found in acid intrusion pegmatites (granite pegmatites), which contain quartz and beryllium. **Geological age** : 480-530 million years		
Characteristics of rough stones	The euclasium appears as lamellar, flattened and compact. In some samples the complete substitution of beryl is noted and the resulting crystals are perfect pseudomorphs, which preserve the hexagonal prismatic shape; typical of beryl. The beautiful sample euclase crystals commonly appear as clusters of well-formed, terminated prisms, in clear and blue patches with colorless areas. Some of the crystals appear cloudy, with quartz encrusted surfaces.		
Main deposits	Although euclases can form geologically from the decomposition of beryl and are often found with beryl, they are distinct mineral species. They have different optical and physical properties. Miami, Zimbabwe produces cuttable crystals of intense cobalt blue hue, of such vividness that they look like good quality sapphires . **Brazil** (Ouro Preto -MG, São Sebastião do Maranhão-Santana do Encoberto), **Colombia** Chivor Boyacá , La Marina- Pauna Mine), **Burma** (Mogok Valley - Mandalay), **Zimbabwe** (Miami, Karoi District - Western Mashonaland). **Minor sources** : Russia (Orenburg district, Southern Urals), Austria; Ireland; Norway, Tanzania (Morogoro district);, United States (Colorado).		
Year of discovery	**1785:** Euclase was first reported in 1785 (incorrectly referred to as 1792 on some articles) from the Orenburg district in the Southern Urals, Russia, where it is found with topaz and chrysoberyl in the gold gravels of the Sanarka (now probably, Sakmara River , Mednogorsk district , Orenburgskaya Oblast ').		
History	According to a common version, euclasium was brought to Europe from South America. Initially, it was analyzed and cataloged by the French geologist, Gauy R. Zh . Then in 1858, when a sample of this mineral was found in Russia, the scientist NI Koksharov studied it. This stone is so rare that, until 1914, only 25 pieces were found. **Name** : From the Greek *eu* = "easy" and *klasis* = "fracture", due to its easy splitting. **Other trade names:** **Variety** : -		
Property attributed	Euclasium is a stone of strength and **clarity** . **It connects the heart to the mind** , elevating intuition and bringing clarity to your inner self. It is a very honest stone that wants to constantly bring in new energy in the hope of releasing unwanted and negative habits. It is also a stone that can **transmute negative energy into positivity** , allowing that energy to be used elsewhere. It also has the effects of increasing synchronicities throughout our lives. This powerful mineral helps **get us on our spiritual path,** and once we commit ourselves, the **synchronicities in daily life will immediately increase** . All of these events happen for a reason and will soon come together to complete your spiritual mission. This stone encourages learning more and fulfilling all dreams and ambitions with pride and integrity. Finally, **it helps to communicate thoughts, ideas, feelings and perceptions.** Euclase facilitates the elimination and control of arthritis pain, muscle cramps and muscle tension within the body. For cuts, scrapes or bruises, a euclase crystal placed on the wound will heal and reduce pain and swelling thanks to its **antibacterial effect** . This stone helps with **inflammation and swelling** of the body's organs and encourages healing.		

	The euclasium is known to reduce the constriction of blood vessels and hardening of the arteries. For those who have headaches that result from sinus problems, this stone will be able to help you, place the crystal on the sinuses or use crystal clear water as a nasal spray. If you have trouble swallowing, taking crystal clear water will alleviate the problem. Euclasium is a well-rounded **antispasmodic, antibacterial, and antiseptic** . It should be remembered that **it is not suitable for young people** . Its energy can awaken selfishness, self-confidence and greed in them. Practicing magicians use a crystal to restore their spiritual strength, to establish communication with the other world. In addition, the mineral helps to find missing persons, as well as to predict the future. Euclase 's ability to positively affect human health **is associated with its color.** **Pale green** lowers blood pressure and its related symptoms: headache, dizziness. Also fights with the effects of stress, removes from depression. **Yellow cheers up** . Blue and blue shades have a positive effect on the gastrointestinal tract, contribute to the normalization of appetite. **Turquoise** (often referred to as "oriental aquamarine" due to its resemblance to aquamarine) improves health in such severe mental illnesses as schizophrenia, autism, psychosis. It has a calming effect. **Planet:** NA **Month:** NA **Zodiac sign:** Pisces, Virgo, Sagittarius **Chakra:** Solar Plexus, Heart, Throat.		
Treatments	Radiation treatments can turn colorless euclasium to green or blue. It is considered a rarity, so both the jewels and the rough crystals are expensive. It needs very careful treatment. Of course, it is strongly not recommended to drop, scratch and hit a stone, because it is fragile. This will cause irreparable damage to the product. Do not allow contact with water, otherwise the mineral will lose its properties. To clean dirt it is best to use dry cleaning. It is preferable to store separately from other jewelry, wrapped in a soft fabric.		
Synthetic counterpart	Some aquamarines have been misrepresented as blue or green euclases.		
Treatment	Due to their perfect flaking, it is better not to clean euclase stones with mechanical systems. Use only warm water, mild detergent and a soft brush. Use the ring protection settings and be sure to discuss with your jeweler the best way to set any euclase.		
It can be confused with	Too rare to compare with other gems.		
Indicative gemological tests	Most euclases get their color from traces **of iron** . However, some Colombian euclases get their greenish blue color from traces of **chromium** . These stones appear red under a **Chelsea filter** .		
Value (2021)	**High:** 500+ $ / ct **3 carat +**	**Medium:** 100 **-** 200 $ / ct **1-3 carats**	**Low:** $ 50 / ct **below 1 carat**
Typical cut	Step cut.		
Famous stones	There are no famous stones of this mineral.		
Record stones	Gems of over 2-3 carats are infrequent. Some purplish Brazilian crystals could reportedly go as high as 10 carats. Colorless gems over 5-6 carats are also rare, although stones **up to about 20 carats have been cut**. The gems reported **over 50 carats are museum pieces**. Smithsonian Institution (Washington, DC): 144 carats (green, Brazil); 48.7 carat (green): 12.5 carat green, Brazil; 8.9 (yellow, Brazil); 3.7 (blue-green, Brazil). Devonian group (Calgary, Alberta, Canada): 15.45 (colorless, Brazil): 14.0 (mint green, Brazil). Private collection: 18.29 (blue-green oval, Brazil); 7.43 (blue, Brazil).		