
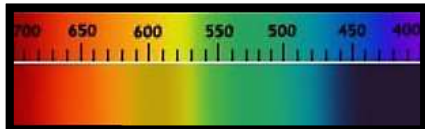



**Warning: this version has been completed with Google Translate , it certainly contains errors or inaccuracies.**

## Technical sheet - general: Aventurine (quartz)

<b>Gemma - names</b>	( Italian - Avventurina ) ( English - Aventurine ) ( French - Aventurine ) ( Spanish - Aventurina ) ( Portuguese - Aventurina ) ( Thai - อเวนเจอร์ ไซต์ ควอตซ์ X wen ce xīn khwxts ' )		( German - Aventurin-Quarz ) ( Arabic - أفينتورين الكوارتز 'afinturin alkuartiz ) ( Russian - Авантюриновый кварц Avantyrinovy kvars ) ( Mandarin - 东陵石 东陵玉 Dōng líng shí dōng líng yù ) ( Swahili - Quartz ya Aventurine ) ( Hindi - एवेंट्यूरिन क्वार्ट्ज eventyoorin kvaartj )		<b>photo</b> 
<b>Colors (GIA)</b>	A variety of generally translucent, fine-grained to compact quartzite / quartzite, the surface of which has a speckled metallic luster. It is often sold in the form of beads or tumbled stone which has a color between <b>light green and medium green</b> . Aventurine can <b>also be of other colors</b> (reddish brown, but occasionally yellow, white or blue) but is <b>typically green</b> . The term itself is used to indicate different types of stones (for example Aventurine Feldspar).				
<b>Cause of Color</b>	Its appearance is due to the presence, in the colorless quartz substance, of other minerals ( <b>mica flakes, fuchsite chromium-mica plates, hematite, etc.</b> ), which can always be observed with the aid of a microscope, and sometimes with a lens. simple, or with the naked eye. <b>Allochromatic Gem</b>				
<b>Classification</b>	<b>Mineral class</b> Silicates	<b>Species - Group (mineral)</b> Quartz - /		<b>Variety</b> Quartzite - Aventurine	
<b>Optical properties</b>	<b>Specific Gravity:</b> 2.64-2.69 Common: 2.66	<b>RI:</b> 1,544 to 1,553 <b>Polariscope :</b> DR / ADD <b>Double refraction:</b> 0.007 to 0.010 (Usually undetectable)		<b>Character optical</b> Positive uniaxial	
	<b>Luster (luster) - luster of the fracture</b> Vitreous - vitreous			<b>Pleochroism</b> NO	
<b>Light</b>	<b>Fluorescence</b> SWUV (254 nm) : (green color) reddish LWUV (365nm) : (green color) reddish			<b>Dispersion (fire)</b> 0.013 (generally not detectable) <b>Phosphorescence</b> NO	
<b>Form</b>	<b>Crystalline dress</b> Massive <b>Melting point:</b> 1 ° C	<b>Phenomenal optical effects</b> Adventurescence (from green mica (fuchsite) plate inclusions)		<b>Crystalline system</b> Triclinic <b>Crystal class</b>	
<b>Chemical formula</b>	Silicon dioxide (plus impurities)  <b>SiO 2</b>			<b>Spectrometer image</b>  Light bands around 649 nm and 682 nm. Not indicative	
<b>Fracture</b>	<b>Flaking</b> Absent	<b>Breaking- Parting</b> Generally absent		<b>Fracture</b> Conchoidal, chipped	
<b>Durability</b>	<b>Hardness (Mohs) - Absolute</b> 6.5-7; 86-100	<b>Toughness</b> Good to fragile		<b>Stability</b> (heat, light, chemicals) Good	
<b>Clarity - characteristics</b>	<b>Typical inclusions:</b> mica flakes , fuchsite chromium-mica plates , <b>hematite</b> etc. Dyeing is used to produce low-cost cabochons with bright colors often seen in inexpensive jewelry. The <b>name "aventurine" may be inappropriate</b> , but it is used due to its greater market appeal than "translucent quartz" or other appropriate names. Sometimes, inclusions of golden metallic pyrite can also cause a sparkle effect. Many of the				

	common inclusions, such as <b>hematite, ilmenite and goethite</b> , have a higher specific gravity than quartz. If they are abundant, they can give aventurine a <b>specific gravity higher than that commonly indicated for this mineral</b> . Abundant inclusions weaken the material and result in a lower apparent hardness.		
	<b>Guy</b> NA	<b>Transparency (commercial) - transparency</b> Translucent to opaque	
<b>Deposits - types of rocks</b>	Found both in primary deposits and as loose pebbles, it can be collected as a secondary product in deposits of other minerals. <b>Geological age</b> : 300+ million years		
<b>Characteristics of rough stones</b>	Generally collected in pebbles of irregular shape and size.		
<b>Main deposits</b>	<b>Austria</b> ( Styria / Mariazell ), <b>Canada</b> (Ontario), <b>Chile</b> , <b>China</b> (Xinjiang , ) , <b>Czech Republic</b> (Liberec Region), <b>Germany</b> (Black Forest, Baden-Württemberg, Saxony), <b>India</b> (Andhra Pradesh, Karnataka, Tamil Nadu ) , <b>Japan</b> ( Niigata prefectura ) , <b>Slovakia</b> (Region of Bratislava, Region of Košice ) , <b>Spain</b> , <b>South Africa</b> (Limpopo, Mpumalanga ) , <b>USA</b> (Arkansas, Nebraska, Vermont, Virginia, Wisconsin),		
<b>Year of discovery</b>	<b>1837:</b> It was first reported in 1837 by a mineralogist named JD Dan (there are no verifiable references to his name).		
<b>History</b>	<p>Some of the earliest known primitive tools were composed of quartz (of any kind). Among the first finds, made of this mineral, there are those found in <b>the Omo valley, in Ethiopia</b> . Many of the tools recovered in this locality date back <b>to more than two and a half million years ago</b> and were built with <b>aventurine quartz</b> , an excellent material for the production of tools thanks to its excellent hardness.</p> <p>The <b>ancient Egyptians</b> had already learned how to make a type of glass with similar optical properties to those that were used to create aventurine glass in the last 2 centuries. The Egyptian recipe for creating this material has, however, been lost and revived over the centuries.</p> <p>The production in Murano of the type of glass, from which the quartz variety got its name, is "practically exhausted" due to the harmful substances used in its manufacture, now banned.</p> <p><b>Philipp Hainhofer (1578 - 1647)</b>, a German polyglot scholar who studied in Italy at the end of the 16th century, was commissioned to find luxury items for Duke Philip II of Pomerania-Szczecin. Carrying out this task, he described in his treatise <b>Pommeranische Kunstschränk</b> (Cabinet of Art of Pomerania) of 1617, some luxury objects present in the Florence of the time. Among them, alabaster, glass paste and aventurine (glass) crockery. According to Hainhofer, such furnishings were made in Pisa, they were beautiful as emerald and heavy as lead, and they were something extraordinary in Germany. In April 1614 (and later), Hainhofer wrote about a Venetian nobleman and "alchemist" named Luca Trono (Tron), who had contact with many princes in Germany, England and France, and who sold them jewels with natural or (mainly ) artificial gemstones. The Throne block included earrings, rosaries, necklaces and a small bowl made of <b>a new artificial stone with golden stars inside</b> . This could <b>only have been aventurine</b> . Throne pretended to have melted a glass himself, by pure chance. At the time, Aventurine was probably a very recent "invention" and Hainhofer's letters provide what is thus far the earliest written proof of its existence.</p> <p>The Swiss watch company <i>Omega</i> began putting aventurine dials (generally the glass imitation) on some of its models, most notably the one called <i>Omega Constellation</i> . <i>Megaquartz Stardust</i>, in the 70s.</p> <p><b>Name</b> : <b>From the Italian</b> <i>a ventura</i> ( but not <i>adventure</i> ) , which means <i>by chance</i> ( aventurine glass, i.e. glass with small copper inclusions, was first prepared by <b>chance at the beginning of the 18th century in Italy</b> ). A story tells that this type of glass was originally <i>accidentally produced</i> (hence the name) in Murano by a worker, who dropped some copper filings into the molten glass. From Murano glass the name passed to the mineral, which exhibited a similar appearance.</p> <p><b>Other trade names:</b> Greenlandite (aventurine), Indian jade, aventurine quartz, <b>Variety</b> : /</p>		
<b>Property attributed</b>	Aventurine is, primarily, the <b>stone of prosperity</b> . This crystal attracts abundance into life, not passively, but by inspiring you to foster desirable qualities and to do the inner work		

	<p>needed to embody the best self: <b>the self that is capable and worthy of living a prosperous life</b> . Aventurine encourages you to embrace strong and trustworthy leadership qualities. It is thought to stimulate dreams and have a positive effect <b>on psychic abilities</b> . This crystal also helps you enjoy life while sharing your energy and experiences with those around you. In addition, it improves <b>resilience</b> , relieves <b>professional performance anxiety and stimulates mental clarity, creativity and compassion</b> . On a more physical level, it promotes the healthy functioning of <b>the thymus gland</b> (located in the chest), also supporting the nervous system, balances blood pressure and contributes to lowering cholesterol. It is also said to help <b>with weight loss or gain by</b> stimulating a healthy metabolic rate.</p> <p><b>Planet:</b> Mercury, Venus  <b>Month:</b> August <b>Zodiac sign:</b> Aries, Leo  <b>Chakra:</b> Heart</p>		
<b>Treatments</b>	<p>Aventurine is an inexpensive and popular material for making tumbled stones. If the mica particles are small, a smooth, shiny finish can be achieved, while larger mica particles tend to give the polished stones a pitted appearance. <b>Aluminum oxide, cerium oxide, and tin oxide</b> all produce a bright glaze on aventurine.</p> <p>It is also often treated with oil to bring out the vibrancy and impart a darker color and make it more attractive. It is possible that it is subjected to a dyeing process, to increase its color, but even in this case it is not a prevalent intervention.</p>		
<b>Synthetic counterpart</b>	<p>There is no real synthetic aventurine, but aventurine glass, a man-made product that resembles natural aventurine but has an even finer appearance, is frequently found in jewelery and mineral stores. It is obtained from a colorless glass inside which there are numerous <b>small red octahedra (solid)</b> , made of metallic copper, whose faces are equilateral triangles. Its hardness is considerably lower than that of aventurine glass (4.5 / 5 against 7 of natural stone). The shape of the inclusions, easily identifiable with a lens, clearly distinguishes it in all cases from natural aventurine and sunstone (a feldspar with a similar optical effect).</p>		
<b>It can be confused with</b>	<p>Aventurine <i>feldspar</i> or <b>sunstone</b> can be confused with orange and red aventurine quartzite, although the former is generally of greater transparency. Aventurine is often characterized by an overabundance of fuchsite, sometimes opaque with light and dark bands, which can also be mistaken for <b>malachite</b> . In both cases, a simple gemological examination (RI, birefringence, appearance, microscope examination) can distinguish them.</p> <p>Another common imitation is the <b>golden stone</b> ( <i>goldstone</i> in English or <i>Goldfluß</i> in German). It is visually distinguished from aventurine and sunstone by its coarse copper flakes, dispersed inside the glass in an unnaturally uniform way. It is usually a golden-brown color, but it can also be blue or green.</p> <p>There are a handful of other gems that may look similar to Aventurine, including <b>variscite , chrysoprase, green chalcedony, and amazonite</b> . However, most of these are easily distinguishable through a simple scratch test and inspection of colors or inclusions. Rarely, it can be passed off as <b>jadeite or nephrite</b> (jade). Again, simple routine tests can easily separate it from the minerals it intends to mimic.</p>		
<b>Indicative gemological tests</b>	<p>It exhibits a reddish color when viewed through the chelsea filter . It has the typical features of quartz, generally with less transparency. Standard tests, starting from simple observation, can help identify both natural quartzite and its imitations.</p>		
<b>Value (2021)</b>	<b>High : 5+ \$ / ct</b> <b>Great / good pieces</b>	<b>Medium: 2- 5 \$ / ct</b> <b>Medium size / quality pieces</b>	<b>Low: 0.5-1 \$ / ct</b> <b>Small pieces</b>
<b>Typical cut</b>	<p>Most of the material is carved in beads, tumbled stones or figurines. Only the finest quality stones are molded into cabochons and set into jewels.</p>		
<b>Famous stones</b>	<p>An aventurine quartz (salmon-colored) hand seal with jewels was created by Fabergé, Moscow, and dates from around 1890.</p>		
<b>Record stones</b>	<p>There are aventurine blocks of various kilos. However, the weight of the largest piece ever recovered is unknown.</p>		