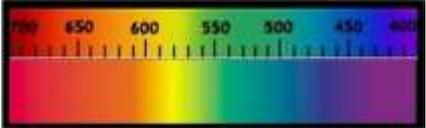


**Warning: this version has been completed with Google Translate , it certainly contains errors or inaccuracies.**

## Technical sheet - general: Kunzite

<b>Gemma - names</b>	( <b>Italian</b> - Kunzite) ( <b>English</b> - Kunzite) ( <b>French</b> - Kunzite) ( <b>Spanish</b> - Kunzita ) ( <b>Portuguese</b> - Kunzita ) ( <b>Thai</b> - )	( <b>German</b> - Kunzit ) ( <b>Arabic</b> - كونزيت kunzit ) ( <b>Russian</b> - Кунсайт Kunsayt ) ( <b>Mandarin</b> - 锂紫玉 lǐ zǐ yù ) ( <b>Swahili</b> - Kunzite ) ( <b>Hindi</b> - कुजिते kunjite )	<b>photo</b> 
<b>Colors (GIA)</b>	Violet-pink, light intense. Color is the most important value factor of kunzite. The more vivid the color, the higher the value. Technically, kunzite is not classified as a gem. Instead, based on the physical properties of kunzite, it is officially a mineral.		
<b>Cause of Color</b>	Kunzite has a unique color due <b>to manganese</b> : more or less intense purple pink depending on the orientation of the crystals and the presence of manganese. <b>Allochromatic gem.</b>		
<b>Classification</b>	<b>Mineral class</b> Inosilicates	<b>Species - Group (mineral)</b> Spodumeno - pyroxenes	<b>Variety</b> Kunzite
<b>Optical properties</b>	<b>Specific Gravity:</b> 3.15 - 3.21 <b>Municipality:</b> 3.18	<b>RI:</b> 1,653 - 1,682 (common 1,660-1,680) <b>Polariscope</b> : DR <b>Double refraction:</b> 0.014 to 0.016 (up to 0.27 less frequently )	<b>Character optical</b> Positive biaxial
	<b>Luster (luster) - luster of the fracture</b> Vitreous - vitreous vivid		<b>Pleochroism</b> Strong trichroism: colorless - pink - purple
<b>Light</b>	<b>Fluorescence</b> <b>SWUV (254 nm)</b> : salmon, purplish pink <b>LWUV (365nm)</b> : Strong orange		<b>Phosphorescence</b> <b>Average:</b> purplish-red / orange
<b>Form</b>	<b>Crystalline dress</b> Prismatic, tabular  <b>Melting point:</b> about 1420 ° C	<b>Phenomenal optical effects</b>	<b>Crystalline system</b> Monoclinic <b>Crystal class</b>
<b>Chemical formula</b>	Lithium and aluminum silicate  <b>LiAlSi<sub>2</sub>O<sub>6</sub></b>		<b>Spectrometer image</b>  Not indicative
<b>Fracture</b>	<b>Flaking</b> Perfect (2 directions) at angles of 87° and 93°.	<b>Breaking- Parting</b> Frequent twinning	<b>Fracture</b> Irregular, conchoidal
<b>Durability</b>	<b>Hardness (Mohs) - Absolute</b> 6.5-7; 86- 100	<b>Toughness</b> Fragile	<b>Stability</b> (heat, light, chemicals) Low Sensitive to light and heat and shocks.
<b>Clarity - characteristics</b>	<b>Typical inclusions:</b> few inclusions, some elongated, arrow-shaped crystalline cavities, liquid inclusions in veils. frequently aligned inclusions such as tubes or fractures. 		

	<b>Type I.</b> Typically free of inclusions	<b>Transparency (commercial) - transparency</b> Transparent to translucent
<b>Deposits - types of rocks</b>	Kunzites are found almost exclusively in lithium-rich granite pegmatites. It is a relatively rare mineral, present in association with quartz, microcline, albite, muscovite, smoky quartz, lepidolite, tourmaline and beryl, and more rarely with topaz, amblygonite, apatite and cassiterite. Kunzite has also been reported in rare cases in aplites and gneisses. <b>Geological age</b> : 40+ million years	
<b>Characteristics of rough stones</b>	Kunzite is monoclinic and its crystals often take on a blade shape. Its rough shape is dramatic.	
<b>Main deposits</b>	Afghanistan (Kunar, Nuristan), Brazil (Minas Gerais), Madagascar, Sri Lanka (Ratnapura), USA (Pala-California)	
<b>Year of discovery</b>	<b>1902 or 1903:</b> Kunzite was recognized for the first time, as a unique variety of spodumene, in 1903 (other sources speak of 1902). It was described as transparent, lilac and from Pala, California.	
<b>History</b>	Kunzite and Hiddenite were not recognized as completely separate minerals until 1879. When Kunzite was discovered to be a form of the Spodumene family (discovered in 1877). It was identified as a gem only in the early 1900s. only after <b>the 1990s</b> that this gem became a more traditional gemstone, having only been used as a collectible gem before that time. <b>Name</b> : Named by H. Charles Baskerville in honor of <b>George Frederick Kunz</b> [1856-1932], mineralogist, gemologist, author, publisher and American vice president of Tiffany and Co. of New York, New York, USA. <b>Spodumene</b> , whose name derives from the Greek, means "color of the ashes", because it is often gray, it has the <b>phenomenon of phosphorescence</b> , it lights up in the dark after being exposed to ultraviolet or natural light.	
<b>Property attributed</b>	It is a stone that evokes <b>tenderness and shy purity</b> , which stimulates the mind <b>during sleep</b> , causing love dreams. It balances the mind, relieves emotions during a bereavement. It should be given to unruly children. It is a stone that accumulates little negative energy. In Asia and north-eastern Europe it has been used since the 16th century as a gem and as <b>a protective talisman, symbol of rebirth</b> . Based on the coloring, many think kunzite relates to <b>matters of the heart</b> , including love, relationships, and communication. Others see kunzite as a calming stone. They believe it promotes <b>inner peace</b> , stress reduction, and harmony, perhaps helping someone navigate complex emotional situations. Kunzite, although a stone of peace, is a rather powerful healing stone that has a beneficial effect on a wide range of physical and emotional ailments. Not only does it assist those who have suffered from inner turmoil derived from old wounds, but it allows you to accept constructive criticism without anxiety, allowing and helping your ability to compromise without getting lost. By strengthening and strengthening the <b>heart muscle</b> , Kunzite can be used in the treatment of the <b>lungs</b> , <b>circulatory functions and stress-related diseases</b> . Kunzite can be used to stimulate the secretion of <b>hormones</b> that will physically improve one's well-being. <b>Planet:</b> Pluto and Venus <b>Month:</b> February <b>Zodiac sign:</b> Taurus <b>Chakra:</b> Heart	
<b>Treatments</b>	Some of the natural colors of kunzites will change color after heating or irradiation. The pink color of natural kunzite is generally stable up to around <b>500 °C</b> where it will fade to colorless. This color can be restored by <b>irradiation</b> . When pink spodumene is irradiated, an unstable brown or green color is produced that will show signs of fading within hours in a well-lit location. Heating to about <b>200 °C</b> will restore the original pink color. Heating to <b>150 °C</b> improves its brownish color and purple color. Low temperatures, in the range of 100-250 °C, are generally used to convert a bluish or purplish pink to a lighter pink color. Color can be enhanced or " <b>created</b> " by <b>artificial irradiation (undetectable)</b> . Irradiation of kunzite containing pink or purple manganese produces an intense, deep green color, which fades very quickly (approximately 1 hour) in light or with slight heating. This change was first reported in 1909 by Meyer.	
<b>Synthetic counterpart</b>	There is no synthetic kunzite (some sellers report an artificial variety created with the Hydrothermal system, but in general it is CZ, or more rarely YAG)	
<b>It can be confused with</b>	Amethyst, Beryl, Petalite, Sapphire, Scapolite, Pink Spinel, Pink Topaz, Pink Tourmaline / Rubellite, Pink Quartz, Pink Sapphire. It can be imitated with colored glass, doublets / composite stones, corundum or synthetic spinel.	

<b>Indicative gemological tests</b>	Strong pleochroism is indicative, especially when taken in combination with RI and birefringence.		
<b>Value (2021)</b>	<b>High</b> : 20+ \$ / ct <b>3 carat +</b>	<b>Medium</b> : 10 \$ / ct <b>1-3 carats</b>	<b>Low</b> : \$ 5 / ct <b>below the carat</b>
<b>Typical cut</b>	The perfect flaking of the kunzite makes the faceting of the precious stones considerably more difficult. This strong tendency for kunzite to crack also means that a little more attention is needed to prevent damage when wearing a kunzite gemstone set in a ring. In general, kunzite is faceted whenever a high-quality specimen is found. It is usually cut into a shape you would find with other gems, such as a classic round, oval, radiant, cushion cut or similar. Cut kunzite usually makes its way into rings or pendants, although it can also appear in earrings or bracelets.		
<b>Famous stones</b>	The stone had a moment of fame during a Jackie Kennedy Onassis personal effects auction at Sotheby's in <b>1996</b> . A ring with a cushion-cut pink kunzite sparked a bidding frenzy, which ultimately went for \$ 415,000, which was well above the expected selling price.		
<b>Record stones</b>	It is not uncommon to find large kunzite. Raw crystals of spodumene were found in gigantic proportions, one of the largest being a single crystal measuring over approximately 16m in length and weighing <b>90 tons</b> ! Spodumene is the main <b>source of lithium</b> , which is the lightest of all metals.		