
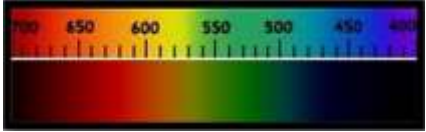
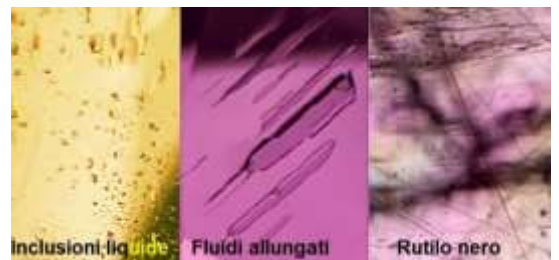


**Warning: this version has been completed with Google Translate , it certainly contains errors or inaccuracies.**

## Technical sheet - general: **Dias poro (Zul tanite )**

<b>Gemma - names</b>	( <b>Italian</b> - Zultanite) ( <b>English</b> - diaspore- zultanite) ( <b>French</b> - Zultanite) ( <b>Spanish</b> - Zultanita ) ( <b>Portuguese</b> - Zultanita ) ( <b>Thai</b> - )	( <b>German</b> - Zultanit ) ( <b>Arabic</b> - الزلتيت elevation ) ( <b>Russian</b> - ЗУЛТАНИТ Zultanit ) ( <b>Mandarin</b> - 祖坦 zǔ tǎn ) ( <b>Swahili</b> - Mzultani ) ( <b>Hindi</b> - जुल्तानाइट zultaanait )	<b>photo</b> 
<b>Colors (GIA)</b>	White, brown, colorless, pale yellow, greyish, greenish gray, lilac, pinkish.		
<b>Cause of Color</b>	<b>Color</b> : contains traces of iron, chromium, titanium and manganese. <b>Cause of color change</b> : the electronic transitions between different energy levels involving the 3d orbitals of the Fe <sup>3+</sup> and Cr <sup>3+</sup> trace elements in the zultanite give rise to the relatively high transmittance observed in the green region (about 500 nm) and in the red-orange region (600-780 nm) of the visible light.		
<b>Classification</b>	<b>Mineral class</b> Oxides - Hydroxides	<b>Species - Group (mineral)</b> Diaspore - Diaspore	<b>Variety</b> Diaspore - Iridescent diaspore
<b>Optical properties</b>	<b>Specific Gravity:</b> 3.30-3.40 <b>Municipality:</b> 3 , 39	<b>RI:</b> 1.682 - 1.752 <b>Polariscope</b> : DR <b>Double refraction:</b> 0.040 - 0.048	<b>Character optical</b> Positive biaxial
	<b>Luster (luster) - luster of the fracture</b> Vitreous, pearly - pearly in cleavage		<b>Dispersion (fire)</b> 0.020
<b>Light</b>	<b>Fluorescence</b> SWUV : Red or green LWUV : Yellowish white		<b>Phosphorescence</b> NA
<b>Form</b>	<b>Crystalline dress</b> Elongated plate crystals (tabular); even massive acicular needles; foliate or fibrosis. <b>Melting point:</b> 1700 °C	<b>Phenomenal optical effects</b> Cangianza Cat attitude (rare)	<b>Crystalline system</b> Orthorhombic  <b>Crystal class</b>
<b>Chemical formula</b>	Aluminum oxide-hydroxide  <b>AIO ( OH)</b>		<b>Spectrometer image</b> 
<b>Fracture</b>	<b>Flaking</b> Perfect (1 direction) Bill (1 direction) Weak-traces (1 direction)	<b>Breaking- Parting</b> SI- Forms heart-shaped geminations or pseudo-hexagonal aggregates.	<b>Fracture</b> Concoidal
<b>Durability</b>	<b>Hardness (Mohs) - Absolute</b> 6.5-7; 86-100	<b>Toughness</b> Very fragile	<b>Stability</b> (heat, light, chemicals)
<b>Clarity - characteristics</b>	<b>Typical inclusions:</b> elongated fluid inclusions and planes of fluid inclusions. Thin black rutile needles and brown hexagonal crystals were also observed.		
	<b>Type II</b> Normally included	<b>Transparency (commercial) - transparency</b> Transparent to translucent	



<p><b>Deposits - types of rocks</b></p>	<p>The mineral diasporite occurs as a <b>weathering product of corundum or emery</b> and is found in granular limestones and other crystalline rocks. Well developed crystals are found in the emery deposits of the <b>Urals</b> and in Chester, Massachusetts, USA and in the kaolin at Schemnitz in Hungary. If obtainable in large quantities, it would be of economic importance as a source of aluminum. The difference between the common diasporite and what is called zultanite is that the former does not show iridescence, while the latter does.</p> <p><b>Geological age</b> : Small crystals may have formed at the end of the Proterozoic (2.5 billion to 541 million years ago), while macrocrystals may date back to paleocene (66-55.8 MA), eocene (55.8-33.9 MA) and oligocene (33.9-23 million years ago).</p>
<p><b>Characteristics of rough stones</b></p>	<p>Elongated acicular crystals; also stalactitic, foliate, scaly, scattered and massive.</p>
<p><b>Main deposits</b></p>	<p>The Marmaris area of Pinarcik village , Milas district, Muğla province in southwestern <b>Turkey</b> appears to be the source of all the large gem-quality crystals that have been faceted to date from a bauxite vein. , or aluminum ore. Recently <b>new iridescent diasporite deposits have been discovered in Mong Hsu, Myanmar / Burma</b> (other common diasporite deposits : Mohnyin -Kachin , Pyin - Oo - Lwin -Mandalay, Salingyi , Loilen -Shan), and near the village of Ragha , in Goshta district , Nangarhar province , <b>Afghanistan</b> , which have a typical pink color.</p> <p><b>Common diasporite deposits</b> : <b>Antarctica</b> ( Larseman Hills, King George Island), <b>Argentina</b> ( Andalgalá -Catamarca, Aldea Alpeg-Chubut , Picunches - Neuquén, Iglesia -San Juan), <b>Australia</b> ( Pambula / Tempora-NSW, Ambalindum -NT, Williamstown -SA, Wartah -Tasmania, Mount Ida- Vic , Eudamullah Station-SA), <b>Austria</b> ( Lölling-Carinthia , Felling - Lower Austria, Glanegg - Salzburg, Traibach - Styria, Obernberg am Brenner-Tirol, Wayer -Upper Austria), <b>Azerbaijan</b> ( Gedebej ), <b>Belarus</b> ( Babruysk), <b>Belgium</b> ( Cahai ), <b>Bolivia</b> ( Cerro Tezna ), <b>Brazil</b> ( Paramirim das Crioulas -Bahia, Barro Alto- Goiás, Curionópolis -Pará, Jaú do Tocantins-Tocantins), <b>Bulgaria</b> ( Madzharovo - Haskovo , Elshitsa-Pazardzhik , Bankya / Chelopech -Sofia), <b>Cambodia</b> ( Battambang), <b>Canada</b> ( Holberg -BC, Foxtrap -NFL-L, Val- des -Sources-Québec), <b>Chile</b> ( Escondida -Antofagasta, El Morro-Atacama, El Indio- Coquimbo , Pozo Almonte - Tarapacá ), <b>China</b> ( Nanchuan - Chongqing, Shoushan / Longyan -Fujian, Baise-Guangxi, Zunyi-Guizhou, Qinglong - Hebei, Luoyang-Henan, Chenzhou -Hunan, Laoshidan -Inner Mongolia, Zhimafang - Jiangsu, Hanzhong -Shaanxi, Zibo -Shandong, Lulinag -Shanxi, Leshan -Sichuan, Yining-Xinjiang , Kunming-Yunnan, Lishuijiang ) <b>DR Congo</b> ( Haut -Katanga), <b>Ecuador</b> ( Loja ), <b>Eswatini</b> ( Shiselweni ), <b>Finland</b> ( Joensuu , Salo, Orivesi ), <b>France</b> ( Aint-Illpize - Auvergne - Rhône -Alpes, Chalmoux - Bourgogne -Franche- Comté , Prades - Occitanie , Les Baux -de-Provence- Provence-Alpes- Côte d ' Azur ), <b>Germany</b> ( Bodenmais-Bavaria , <b>Greece</b> ( Phocis , Maroneia-Sapes - East Macedonia and Thrace , Mt. Kerketeas , Naxos), <b>Greenland</b> ( Arsuk Fjord , Kujalleq ), <b>Honduras</b> ( Lepaguare ), <b>India</b> ( adhya Pradesh), <b>Indonesia</b> ( East Java, Gorontalo, Halmahera - North Maluku , Papua, South Kalimantan, West Nusa Tenggara , West Sumatra), <b>Iran</b> ( Fars , Kohgiluyeh and Boyer-Ahmad), Iraq ( Qala-Diz - Sulaymaniyah ), <b>Italy</b> ( Cusano Mutri-Campania, Carrodano-Liguria, Val Munari-Veneto), <b>South Korea</b> ( ), <b>Japan</b> ( Kamikita-Aomori , Doi-Ehime , Kamo-Hiroshima, Oshima-Okkaido , Hanamaki-Iwate , Ichikikushikino - Kagoshima, Fukuchiyama -Kyoto , Fukuchiyama -Nagano, Gotoh -Nagasaki, Ōmi -Niigata, Siki-Oita , Bizen -Okayama, Abu-Yamaguchi), Kazakhstan ( Ayagoz , Aktogay -Karaganda, Kostanay ), <b>Laos</b> ( Anouvong - Xaisomboun ), <b>North Macedonia</b> ( Berovo , Prasad-Prilep ), <b>Madagascar</b> ( Anosy , Ihorombe , Vatoavy , <b>Malawi</b> ( Mwanza), <b>Malaysia</b> ( Simunjan -Sarawak), <b>Mexico</b> ( Chínipas -Chihuahua) <b>Mongolia</b> ( Manlai , Erdenetsogt ), <b>Morocco</b> ( Zagora ) <b>Namibia</b> ( Windhoek Rural, Epupa ), <b>New Zealand</b> ( Kermadec Islands , Thames-Coromandel ), <b>Norway</b> ( Aneland , Ivesdalsfjellet , Tromsø , Larvik , Modum ), <b>Papua New Guinea</b> ( Astrolabe , Kainantu , Morobe , Sandaun ), <b>Peru</b> ( Castilla, Hualgayoc , Huarochiri , Huancabamba ), <b>Philippines</b> ( Bato - Tabio -Luzon, South Cotabato-Mindanao), <b>Portugalo</b> ( Arouca -Aveiro), <b>United Kingdom</b> ( Sr. Just-Cornwall, Renfrewshire - Scotland), <b>Czech Republic</b> ( Bory - Vysočina ), <b>Dominican Republic</b> ( Cotuí-Sánchez Ramírez ), <b>Romania</b> ( Lup ș a -Alba), <b>Russia</b> ( Gornyi Altai , Okinsky , Mlass , Kamchatka Krai , Karachay-Cherkessia , Lake Grubependity , Noril'sk , Khibiny Massif , Saranovskaya , Primorsky Krai , Pitkyarantsky , Sverdlovsk Oblast) <b>Serbia</b> ( Majdanpek ), <b>Slovakia</b> ( Banská Belá , Michalovce , Remetské Hámre , Mojšín ), <b>Slovenia</b> ( Črni vrh - Dobrova - Polhov Gradec ), <b>Solomon</b> ( Islands, Guadalcanal), <b>South Africa</b> ( Tshwane-Sauteng , Bela-Bela-Limpopo, Madibeng -NW, Gloucester Farm-NC), Spain ( Nljar -Andalusia, Villanueva de Bogas - Castile - La Mancha) <b>Sudan</b> ( North Darfur), <b>Sweden</b> ( Väster Silfberg / Gällivare</p>

	/ Boliden / Torsby-Dalarna ), <b>Switzerland</b> (St Stephan-Berna, Leventina-Ticino, Leuk-Valais ), Taiwan ( Ruifang -NTC), <b>Tanzania</b> ( Longido -Arusha), Turkey (minor deposits, Çanakkale , Serinhisar , Efes- Izmir, Ordu ), <b>Hungary</b> ( Nagyharsány , Fejér , Nógrád ), Uruguay (Minas- Lavelleja ), <b>USA</b> (Nome Census-Alaska, CCochise / Greenlee -Arizona, Vallecito / Lakeshore / White Mountains-California, Manassa / Rosita-Colorado, Long Hill-Connecticut), Georgia (Pine Mountain, Litchfield -Maine, Chester-Massachussetts, Missouri, Buckskin Range / Cactus Range-Nevada, Socorro -NM, Alamance / Corundum Hill-NC, Unionville -PA, Edgefield -SC, Utah, Spottswood -Virginia, Slide Creek-WA), <b>Uzbekistan</b> ( Okhangaron / Chatkal - Kuraminskii -Tashkent, <b>Vietnam</b> (Cao Loc - L ậ ng S ớ n , L ậ c Yên - Yen Bá ), <b>Zimbabwe</b> ( Mazowe - Central Mashonaland , Shurugwi - Midlands).		
<b>Year of discovery</b>	<b>1801</b> : first identification of mineral Diaspore. <b>1977</b> : Iridescent-zultanite diaspore: First appearance in a London gemological laboratory.		
<b>History</b>	High-quality zultanite is currently mined in only one place in the world: on the heights of the Anatolian mountains, 1,200 meters above sea level. The mine is located near the Turkish village of Selimiye . Its discovery dates back to <b>1977</b> . But the actual systematic mining began there in the mid-1980s. <b>Name</b> : The term <b>diaspore</b> was coined in 1801 by Abbot Rene Just Haüy , and referred to specimens of this mineral found in Mramorsk Zavod , Sverdlovskaya Oblast, Urals, Russia. from the Greek διασπείρειν ( diaspeiro ), which means to disperse, alluding to the usual decrepitation in the flame. The name Zultanite instead, was born in early <b>2006</b> , when Murat Akgun , owner of the Turkish mine that produces the most famous gems, suggested finding a more pleasant "marketing" name for the mineral. Diaspore sounded, according to the tycoon, like the name of amushroom. The first recommended alternative was <b>Ottominites</b> in honor of the Ottoman Empire of Turkey. On the inspiration of this first denomination was born " <b>Sultanite</b> " (which honored the 36 sultans of the Ottoman Empire who ruled Turkey and beyond from 1299 to 1923) which had a more regal connotation, <b>The initial "Z"</b> was introduced to give a touch of originality. <b>Other trade names</b> : Czarite , diasporite , empholite , kayserite , or tanatarite .		
<b>Property attributed</b>	While the common diaspore has been known for over 200 but little known in the jewelry world, Zultanite is a fairly recent discovery. Its optical characteristics are different from those of the common diaspore, therefore also its potential esoteric properties. The perceived supernatural qualities are therefore just as modern. Zultanite is said to help the wearer <b>retrieve lost items</b> , protect businesses from competition and regulation, instill courage in the fearful, guarantee victory against enemies, increase fame and fortune, as well as <b>protect from the evil eye</b> , from witches and jealousy. Zultanite helps stimulate the mind, <b>combat age-related memory loss</b> , relieve stress and aid in weight loss, stimulate the mind for study and memorization, or to help reduce stress. Crystal wearers recommend that to use the stone it should be placed on the forehead, worn around the neck, or placed on the solar plexus. The placement of zultanite interacts directly with the mind chakra. <b>Planet:</b> <b>Month:</b> <b>Zodiac sign:</b> <b>Chakra:</b> Especially those of the eye and throat		
<b>Treatments</b>	There are no known treatments related to this gem.		
<b>Synthetic counterpart</b>	There is no synthetic counterpart, however glass imitations are common that exhibit much harsher color reflections dominated by a single hue.		
<b>It can be confused with</b>	Peridot (due to the strong doubling of the facets through the gem), but normally the peridot has a much more intense color. Iron-rich green sapphire has an absorption spectrum close to diaspore.		
<b>Indicative gemological tests</b>	Visible doubling, strong birefringence, RI, Zultanite has a simple method to distinguish it from more common fakes. The stunning natural tranquil colors are difficult to imitate. The faux stones have hard neon shades.		
<b>Value (2021)</b>	<b>High</b> : 10,000 \$ / ct <b>3 carat +</b>	<b>Medium</b> : 500 \$ / ct <b>1-3 carats</b>	<b>Low</b> : \$ 100 / ct <b>below the carat</b>
<b>Typical cut</b>	Only a very small amount of gem-quality zultanite can be extracted from tons of ore; furthermore, only 50% of the total extracted zultanite is suitable for cutting and 98% of the rough zultanite stones will be lost during processing. The cut is often decided by the		

	shape of the stones and how much can be saved, also in consideration of the fragility of the material and the directions of flaking. Non-standard forms are often used.
<b>Famous stones</b>	The Kottowski cut "Sultans Shield" stone, <b>96.20</b> carat, was created for the owner of the mine from Turkey, Zultanite Gems LLC in Fort Lauderdale, Florida. London-based jewelry designer Stephen Webster revealed his creation in an exclusive exhibition in Las Vegas to a select group of people in the industry. It was valued at over \$ 1 million.
<b>Record stones</b>	<b>80-carat</b> oval gemstone won the "Cutting Edge" of the AGTA Spectrum Awards in 2008 under "Phenomenal Stones" at the time it was the great Zultanite of the world.