



**DOERR DALLAS
VALUATIONS**



Aurélia Turrall
Jewellery Specialist

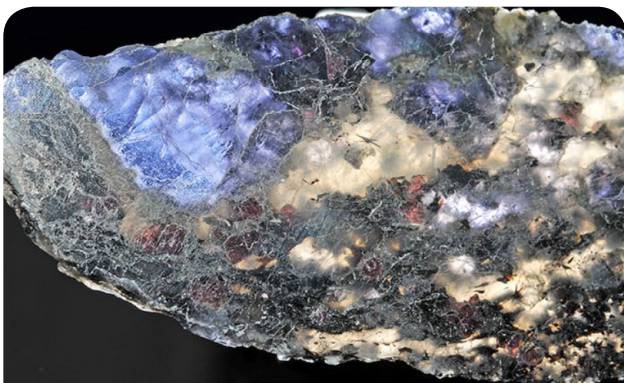
I FOR IOLITE

Iolite is the gemstone variety of cordierite, a magnesium, iron, aluminium and cyclosilicate mineral named after the French geologist Pierre Cordier (1777 - 1861) - founder of the French Geological Society.

As with some other blue gemstones, iolite is known for its pleochroic properties giving it that extra sparkle. Pleochroism is an optical phenomenon in which a substance has different colours when observed at different angles, especially with polarized light.

Iolite occurs in several areas of Africa, including Kenya and central Tanzania. In fact, when Tanzanite was first discovered, geologists thought it was cordierite.

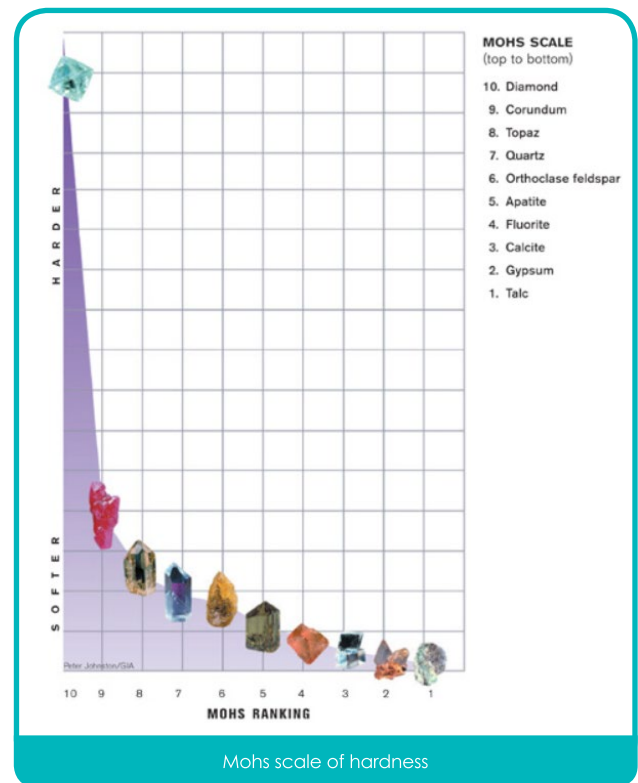
Other iolite source countries include India, Brazil, Norway and a large deposit found in 1994 in Madagascar.



Iolite rough crystal found in Brazil

The name iolite comes from the Greek word ios, meaning "violet". It is said that iolite slices were used by Viking navigators to locate the sun on cloudy days, used as some form of compass.

The gem rates at 7 to 7.5/10 on the Mohs hardness scale. The Mohs scale of mineral hardness was created by Friedrich Mohs in 1822 and determines the scratch resistance of minerals when scratched by another mineral.



The Mohs scale is used to manufacture everyday objects: your mobile phone's screen glass is made of a material that scratches at level 6, some at level 7.

Even though iolite scores rather high on the Mohs scale, it has strong cleavage in one direction, giving it only a fair toughness. Cleavage, caused by weak atomic bonds, is the weakest plane in a gemstone where the gemstone can split.

Call us today to enquire about an appointment on **01883 722736** or email **enquiries@doerrvaluations.co.uk** or visit our website **www.doerrvaluations.co.uk**

For this reason, jewellers are a little reluctant to use the gem in jewellery, especially any hard-wearing jewel such as rings for example.

The gem's most sought after colours are violetish blue to fine blue. But iolite can appear to be greyish, even transparent, or golden and even brown. Depending on where the light hits, different colours will show. For this reason, iolite can be confused with colour change sapphires.



The three commonly mistaken gems

Vivid violetish iolites over 5 carats are rare and cannot be treated in the same way as corundum (sapphires) can be. Unlike sapphires, iolite's chemical composition won't allow it to be heat treated to intensify its colour. The gem would simply melt at such high temperatures.

Iolite is more often than not faceted, bringing out its unique transparency, free of inclusions.



A marquise iolite, free of inclusions



Cabochon iolites

But it also is a popular choice for cabochons.

In some iolites, a phenomenon called cat's eye can sometimes be observed. This effect comes out at its best when the gem is cut as a cabochon.

The cat's eye effect is caused by long, parallel, tubular inclusions. It can also be found in other gems such as sapphire and chrysoberyl.



Chatoyancy in chrysoberyl

Though iolite is hardly ever treated, making it a very appealing affordable blue-gem alternative, due to its relative hardness and lack of consistent fine quality supply, it is not found in as many workshops as tanzanites for example. However, iolite is also cut as beads and strung to make beautiful colourful necklaces.



A wonderful twenty-first wedding anniversary gift...

Call us today to enquire about an appointment on **01883 722736** or email **enquiries@doerrvaluations.co.uk** or visit our website **www.doerrvaluations.co.uk**