

Knowledge on Synthetics and Imitations of Tanzanite

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Tanzania Minerals Audit Agency has accredited laboratory with **ISO 17025/IEC**. The Laboratory core activity is to analyse samples from Large Scale, Medium and Small Scale Miners, including explorers and researchers. It's the duty of care, for the laboratory to inculcate awareness on the ways and means used by culprits to deceive gemstone buyers.

Though the use of synthetics of gemstones in the country is minimal, the use of imitations of gemstones is something trivial in gem business. Therefore, the need to educate the Tanzanians about this trick is very important. The use of imitations in the gemstones market is something trivial.

Natural Rough and Cut Tanzanite



What is Synthetic Gemstone?

Synthetics are manmade gemstones with the same chemical and physical properties as natural gemstones they imitate. They are made in Laboratory and chemically resemble the natural gemstones.

To date, Synthetic tanzanite is not known in the marketplace. Literature review did not indicate that anyone had successfully produced and marketed synthetic tanzanite. This means no any laboratory which has managed to synthesis tanzanite in the laboratory with the same chemical and physical properties as natural tanzanite.

However, *Doped Heavy Glass*, *YAG (yttrium aluminum garnet)* and *Synthetic Corundum (Sapphire)* and *Synthetic Forsterite* are synthetics used in the market to deceive buyers as tanzanite. In business, synthetic gemstones are allowed in the market but have to be declared that, they are synthetics. The prices for synthetic gemstones are less than natural gemstones.

It is advised to use certified laboratory like TMAA Laboratory (ISO 17025/IEC), if you are not sure of the tanzanite you want to buy.



Picture from Google : Synthetics used in the market to deceive buyers as tanzanite which are Synthetic Forsterite, YAG (yttrium aluminum garnet) and Synthetic Corundum (Sapphire)

What is Imitations of Gemstones?

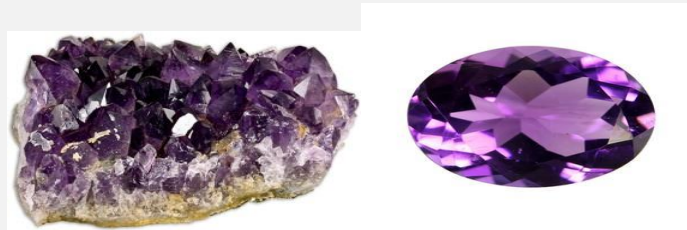
Imitations are natural gemstones which look like. Sometime people use imitations and Simulants interchangeably. For instance blue sapphire looks like blue tanzanite. Imitations exist for every popular gem, and tanzanite is no exception. A few imitations of tanzanite are Sapphire, lolite, Kyanite and Amethyst as seen on the pictures.

Imitations of tanzanite: can you differentiate with the above natural tanzanite?

1.0 Rough and Cut Iolite



2.0 Rough and Cut Amethyst



3.0 Rough and Cut Kyanite



4.0 Rough and Cut Sapphire



Without knowledge and experience, is not easy to differentiate these imitations with natural tanzanite. Similarly, synthetics do confuse with natural tanzanite. Use TMAA accredited laboratory for assurance and Certification.