

LMHC Information Sheet # 6

Paraiba Tourmaline

- **Definition**
- **Report wording**

Members of the Laboratory Manual Harmonisation Committee (LMHC) have standardised the nomenclature that they use to describe a paraiba tourmaline.

Definition

A paraiba tourmaline is a blue (electric blue, neon blue, violet blue), bluish green to greenish blue, green or yellowish green tourmaline, of medium-light to high saturation and tone (relative to this variety of tourmaline), mainly due to the presence of copper (Cu) and manganese (Mn) of whatever geographical origin. The name of the tourmaline variety 'paraiba' is derived from the Brazilian locality Paraiba where this gemstone was first mined.

- Tourmalines with only traces of copper and low colour saturation and / or outside of the defined colour range (above) are not called Paraiba tourmaline⁶.
- Iron-rich copper bearing tourmaline showing in the o-ray polarised spectrum (obtained by UV-Vis-NIR spectrometer) an absorption band at 700 nm higher than the 900 nm absorption band (related to Cu) is not called Paraiba tourmaline.⁶

Report wording

Any paraiba tourmaline shall be described as,

Identification:

| | |
|-----------------------|---|
| (Group): ¹ | (tourmaline)¹ |
| Species: | (natural)¹ (mineral species) tourmaline² |
| Variety: | (colour)³ (paraiba)¹ (tourmaline)⁴ |
| Origin: | (not determined), (undetermined), (Brazil), (Nigeria), (Mozambique), (other)⁵ |

Further information

Paraiba is a gem variety of tourmaline containing copper (Cu) and manganese (Mn). (The variety name is derived from the Brazilian locality Paraiba where this gemstone was first mined, however today it may come from a number of localities.)¹

or, if paraiba is not used in the variety description

This copper (Cu) and manganese (Mn)⁷ bearing tourmaline may also be called "paraiba tourmaline" in the trade. (The name is derived from the Brazilian locality Paraiba where this gemstone was first mined, however today it may come from a number of localities.)¹

Note: Paraiba tourmaline is commonly heated. However, in some cases this treatment is currently not determinable, see also information sheet#8.

¹ Wording and text in parenthesis is optional.

² The name 'tourmaline' shall be used in either the species or variety section (or both) of the report if the group is not mentioned.

³ Optionally insert the colour of the stone being examined particularly if not described elsewhere on the report.

⁴ If 'paraiba' is not used in the 'Variety' section, the word 'tourmaline' shall be used.

⁵ If an origin determination is not included on a report the following wording shall be added in the comments section: 'Geographic origin has not been determined's

⁶ The presence of copper may be mentioned in the comment section.

⁷ If no or only very low traces manganese are present, then manganese is not mentioned in the comment section.

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