

ELECTRONIC COPY

COLORED STONE REPORT

November 28, 2024

Photography is approximate

657428477 IGI Report Number

Species NATURAL TOURMALINE

BI-COLOR TOURMALINE Variety

Shape and Cutting Style **EMERALD MIXED CUT**

1.58 CARAT Weight

Measurements 8.82 x 4.89 x 4.14 mm

COLORLESS AND YELLOWISH Color and Transparency

GREEN,

TRANSPARENT

NATURAL INCLUSION(S) Characteristics

PATTERN



OPTICAL and PHYSICAL PROPERTIES

Refractive Index

Birefringence 0.02

1.624 - 1.644

UNIAXIAL Optic Character

Optic Sign

3.06 Specific Gravity

Optical and physical properties are approximate values



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Characteristics NATURAL INCLUSION(S) PATTERN

The way that light interacts with the gem may create some astonishing optical phenomena, such as a star, a cat's eye effect or change of color, in different varieties.

Gems may be classified in different species, according to their basic chemical composition and crystal structure;

within a certain species, small differences in composition

may results in different colors, or varieties.

Transparency

Species & Variety

As light passes through a gemstone, part of it, if not all, will be absorbed, and part will be transmitted. The more light that is absorbed the less transparent the stone will be.

Characteristics

Internal characteristics are the inclusions of a gemstone. Not only do they provide essential information about the formation but also the conditions in which the gemstone is grown.

Refractive Index

When light passes through air and enters a gemstone it slows down due to a difference in the medium. The ratio between the speed of light in air and in a particular medium is known the Refractive Index.

Optic Character

Determining how light travels through the crystal. Using a range of specialized instruments, we will be able to establish if the stone is isotropic or anisotropic, uniaxial or biaxial.

Specific Gravity

Specific gravity is the ratio of the density of the gemstone to the density of an equal volume of water.

All IGI Laboratories employ a wide range of state-of-the-art equipment, which provides comprehensive and accurate assessment of different gemstones.



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November 28, 2024 657428477 EMERALD MIXED CUT 1.58 CARAT NATURAL TOURMALINE **BI-COLOR TOURMALINE**