



INTERNATIONAL
GEMOLOGICAL
INSTITUTE

ELECTRONIC COPY

COLORED STONE REPORT

July 8, 2025

IGI Report Number 720518669

Species NATURAL BERYL

Variety EMERALD

Shape and Cutting Style CUSHION MIXED CUT

Weight 6.39 CARATS

Measurements 11.93 X 11.76 X 6.86 mm

Color and Transparency GREEN,
TRANSPARENT

Characteristics NATURAL INCLUSION(S)
PATTERN

Country of Origin BASED ON CURRENT GEMOLOGICAL
INFORMATION THE GEMSTONE
DESCRIBED ABOVE WOULD BE
CLASSIFIED AS BEING OF "ZAMBIA "
ORIGIN

Comments:
Indications of moderate clarity enhancement.
Natural emeralds are commonly enhanced as part of
their normal fashioning process.



Photography is approximate



OPTICAL and PHYSICAL PROPERTIES

Refractive Index	1.577 - 1.583
Birefringence	0.006
Optic Character	UNIAXIAL
Optic Sign	-
Specific Gravity	2.72

Optical and physical properties are approximate values

www.igi.org

Species & Variety

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.

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.

Transparency

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.



© IGI 2020, International Gemological Institute

FD - 10 20



THIS DOCUMENT WAS PRODUCED WITH THE FOLLOWING SECURITY MEASURES: SPECIAL DOCUMENT PAPER, INK SCREENS, WATERMARK, BACKGROUND DESIGNS, HOLOGRAM AND OTHER SECURITY FEATURES NOT LISTED AND DO EXCEED DOCUMENT SECURITY INDUSTRY GUIDELINES.

COLORED STONE REPORT



July 8, 2025

IGI Report Number 720518669

Species NATURAL BERYL

Variety EMERALD

Shape and Cutting Style CUSHION MIXED CUT

Weight 6.39 CARATS

Measurements 11.93 X 11.76 X 6.86 mm

Color and Transparency GREEN,
TRANSPARENT

Characteristics NATURAL INCLUSION(S) PATTERN

Country of Origin BASED ON CURRENT
GEMOLOGICAL INFORMATION
THE GEMSTONE DESCRIBED
ABOVE WOULD BE CLASSIFIED
AS BEING OF "ZAMBIA " ORIGIN

Comments:
Indications of moderate clarity enhancement.
Natural emeralds are commonly enhanced as part of their
normal fashioning process.



IGI



July 8, 2025
720518669
CUSHION MIXED CUT
6.39 CARATS
NATURAL BERYL
EMERALD