



INTERNATIONAL
GEMOLOGICAL
INSTITUTE

ELECTRONIC COPY

COLORED STONE REPORT

May 1, 2025	
IGI Report Number	698550334
Species	NATURAL ZOISITE
Variety	TANZANITE
Shape and Cutting Style	OVAL MODIFIED BRILLIANT
Weight	3.20 CARATS
Measurements	10.10 x 8.11 x 5.46 mm
Color and Transparency	BLuish VIOLET, TRANSPARENT
Characteristics	NATURAL INCLUSION(S) PATTERN



Comments:
Tanzanites are commonly enhanced by heat, indicative evidence is typically lacking.



Photography is approximate

OPTICAL and PHYSICAL PROPERTIES

Refractive Index	1.691 - 1.700
Birefringence	0.009
Optic Character	BIAXIAL
Optic Sign	+
Specific Gravity	3.35

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



May 1, 2025

IGI Report Number	698550334
Species	NATURAL ZOISITE
Variety	TANZANITE
Shape and Cutting Style	OVAL MODIFIED BRILLIANT
Weight	3.20 CARATS
Measurements	10.10 x 8.11 x 5.46 mm
Color and Transparency	BLuish VIOLET, TRANSPARENT
Characteristics	NATURAL INCLUSION(S) PATTERN

Comments:
Tanzanites are commonly enhanced by heat, indicative evidence is typically lacking.



IGI



May 1, 2025
698550334
OVAL MODIFIED BRILLIANT
3.20 CARATS
NATURAL ZOISITE
TANZANITE