

gilson created emeralds



From the gem markets of Babylon till today... nearly five thousand years later... the emerald has remained one of the most valuable, most sought after objects in the world. In Medieval times, people believed they could find happiness in love in the emerald's clear, green depths. Dedicated to the Goddess Venus, the emerald has always been the favorite adornment of beautiful women. As the world's supply of fine quality natural emeralds becomes more and more depleted, the cost will naturally increase. Today a one carat emerald of fine quality can cost as much as US\$ 5,000. - or more. Yet you can own a Gilson Created Emerald of comparable size and quality for a fraction of that price. Gilson Created Emeralds are not simulated or imitation emeralds but true synthetics with chemical, physical and optical properties that are similar to those of natural emeralds.

PHYSICAL AND OPTICAL CHARACTERISTICS

	Gilson Created Emerald	Natural Emerald
Chemical composition ..	3 BeO, Al ₂ O ₃ , 6 SiO ₂	3 BeO, Al ₂ O ₃ , 6 SiO ₂
Foreign bodies	Nil	Frequent
Shape	Hexagonal prism	Hexagonal prism
Hardness (Brinell)	7.5 - 8	7.5 - 8
Cleavage	Very Difficult	Very difficult
Fracture	Conchoidal	Conchoidal
Density	2.65 - 2.70	2.65 - 2.75
Acid resistance	Resists all acids except hydrofluoric acid	Resists all acids except hydrofluoric acid
Refractive index	1.558 - 1.575	1.565 - 1.599
Birefringence	0.03 - 0.05	0.05 - 0.09
Optical characteristic	Negative uniaxial	Negative uniaxial
Pleochroism	Green and blue-green	Green and blue-green
Dispersion	0.14	0.14
Reaction to Chelsea colour filter	Red	Red