

Peridot

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Peridot

This attractive green gem stone belongs to the olivine mineral family. At one end of this family is found a mineral named forsterite, a magnesium silicate, Mg_2SiO_4 , at the other fayalite, an iron silicate with the formula Fe_2SiO_4 . Peridot is chemically a magnesium iron silicate, $(MgFe)_2SiO_4$ and lies between the two. Peridot is one of the few gems that occur in nature in one color only. This is due to the metal iron, which forms part of its basic formula. We call such minerals idiochromatic, or "self-colored."

The finest peridots come from the Isle of St. John in the Red Sea, and other sources are Burma and Arizona. The most famous belongs to the U.S.S.R. and once formed part of the royal Russian regalia. This stone is said to be crystal clear and of a fine olive-green color, weighing slightly over 192 carats. Gem-quality peridots of this size are exceedingly rare. Peridot has a hardness of 6,5, but with care it can be worn for a long time without showing undue wear.