



Fluorite

Technically, the mineral known as Fluorite or Fluorspar, is Iron Disulphide (FeS_2).



This amazing mineral is not only valuable for its incredible beauty, but also commercially. Fluorite can be pale green, orange, purple, yellow or brown. It is mined in many locations around the world and may be found either alone or together with metallic ores and other minerals such as baryte, calcite, celestine, quartz and topaz.



Fluorite is a crystal of considerable beauty and is of interest both for decorative purposes, and also for its metaphysical properties and associations. For both of these reasons Fluorite is extremely popular for use in jewellery, including bracelets, necklaces, earrings and pendants. However, despite its beauty, fluorite is not used or classified as a precious stone because of its mechanical properties - it is relatively soft. One of the more interesting features of Fluorite is that it 'Fluoresces' under ultra-violet light. The phenomenon of 'Fluorescence' actually takes its name from this mineral!

The commercial and industrial value of Fluorite is considerable and for these purposes the mineral is graded into three classes; 'Metallurgical grade' is the lowest, 'Ceramic grade' is the next highest and the highest grade is "Acid grade". These various grades of the mineral are used variously as a flux in steel production, the making of high-tech ceramics and even cooking utensils. Perhaps most amazingly, Fluorite is used instead of glass in high performance, high value optics in telescopes, microscopes and photographic lenses where its very low dispersion characteristics make it invaluable for reducing optical aberrations. Nikon, Canon, Zeiss and Leica have all used the unique properties of Fluorite in their highest quality optics. Fluorite objective lenses are manufactured due to their strong hexagonal crystal structure most notable for evenly refracting light.



The green crystals shown in the image below are called "cleavage" crystals, meaning that they are broken by hammers from big fluorite chunks which then reveals the atomic and molecular structures and the Octahedran shapes. These 'cleaved' crystals vary in size from one millimetre to as large as 100x 100 millimetres and all sizes in between. Loose Fluorite octahedron crystals like this do not occur naturally and very few people are aware of this technique.



Fluorite is believed by many to have some very interesting metaphysical characteristics, including the ability to stimulate impartiality and objective reasoning, mental and intellectual achievement and concentration and as balancing and stabilising influences on relationships and groups. Fluorite is also believed to impart a fresh cleansing energy that can help in the clearing of negative energies and transformation of these to energies of love and light, as well as intuition and communication of information that is psychically received, for psychic and spiritual growth.