

QUARTZ



Silicon Dioxide

Quartz is probably the most familiar mineral, certainly it is one that is very widely distributed. It is a major constituent of the Earth's crust, with an estimated volume of 12%. It can be found in igneous rocks, in metamorphic rocks, and is plentiful in clastic sedimentary rocks. It is also very common as a gangue mineral in hydrothermal ore deposits. Quartz crystals are usually six-sided prisms terminating with six faces, but quartz is mostly found in massive form. The presence of impurities create various types of quartz. These include smoky quartz, amethyst, citrine, milky quartz, and rutiled quartz. Druzy quartz is a type which is composed of numerous, small, and closely compacted prismatic crystals, which have grown into voids and crevices in the rock.

The piezoelectric property of quartz is utilised by manufacturers of scientific instruments and gauges, and more commonly in clocks and watches. Large quantities of quartz in the form of silica sand is used in the manufacture of glass, and it is also used in the abrasive known as silicon-carbide. Some of the more attractive and unusual coloured varieties of quartz, such as amethyst, citrine, and smoky quartz are often used to make pieces of jewellery.

THERE ARE SOME LESS COMMON VARIETIES OF QUARTZ, FOR EXAMPLE

Chalcedony -- Microcrystalline variety, Composed of minute quartz crystals with sub-microscopic pores.

Jasper ----- An aggregate of microgranular quartz, its red colour resulting from Iron inclusions.

Tiger Iron --- Quartz gemstone with chatoyant properties, Its striking appearance due to Limonite inclusions.

