



CALCITE

First draft

09.04.06

- Origin** Calcite is the main component of sedimentary limestone and chalk and metamorphic marble. It is one of the most widely found minerals on the Earth's surface. Most stalactites and stalagmites in caves are largely calcite. Calcite can also form as complex crystals, either on its own or in association with other minerals e.g. often seen in amethyst geodes. The name comes from the Latin word for lime - calx.
- Composition** Calcium carbonate Ca CO_3
- Structure** Trigonal with *many* possible crystal habits. Mohs scale 3
Double refraction seen in clear crystals - place one over a single line and two lines will be visible.
- Colour** A huge range - from colourless transparent to translucent and opaque pale blue, pale olive green, pale peachy orange, pale pink and others. The colours are due to very small amounts of other elements.
- Sources** Crystals buys its blue calcite from Madagascar whilst the green, orange and clear calcite is largely from Mexico.

Calcite and the 'Greenhouse effect' - what's the link?

Many sea living organisms (corals, diatoms etc) make their shells out of calcite, using carbon dioxide from the air dissolved in sea water. Seas therefore act as a vital 'sink' for at least some of the carbon dioxide produced by human activity.

Calcite and ammonites

Some ammonite fossils found in limestone, when prepared to reveal their inner structure, show chambers filled with beautiful pale green calcite or semi-filled with beds of tiny calcite crystals.

Holiday makers to Devon may know the red calcite outcrops between Torquay and Paignton. Our first shop in Torquay sold this material in 1987/8 having been collected by Paul and Alex.

Ros Mason April 2006

Crystals (UK) Ltd T/A Crystals Reg. No. 5056864

Ros Mason April 2006
Crystals (UK)Ltd T/A Crystals Reg. No. 5056864