

**Actinolite**  $\text{Ca}_2(\text{Fe,Mg})_5\text{Si}_8\text{O}_{22}(\text{OH})_2$

This mineral derives its name from the Greek word *aktinos*, meaning “ray”, alluding to its fibrous nature. This is the intermediate mineral formed between a solid rich solution full of magnesium ions (tremolite) and iron rich solution (ferro-actinolite) with magnesium being more dominant than the iron ions. It has a monoclinic crystal system, and usually forms elongated prismatic crystals. Actinolite has a hardness of 5-6 with a perfect cleavage. This mineral is found in mafic metamorphic rocks on the green schist facies and also forms part of the amphibolite facies. Actinolite is used in jewelry making, to make insulation materials and in structural fire proofing.



**Actinolite** R28