

## **CHRYSOTILE ASBESTOS OF MINAÇU,GOIÁS, BRAZIL**

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The Cana Brava Mine, in the like-named massif of the Minaçu county accounts for nearly all the brazilian asbestos production. The asbestos mineralization took place in serpentinites which occur intermingled with the metabasic and metaultrabasic rocks of the Cana Brava Massif. The serpentinites were produced by hydrothermal action on dunites and peridotites. Chrysotile veins in variable directions, lengths and thickness cut the serpentinite body. In order to identify and characterize all types of rocks and fibers, studies were executed on the natural rock, the crude fiber and fibers from pilot-plant and milling plant. The employed methods were: petrographic analysis optical microscopy, chalcographic analysis, X-RD, TG/DTA and SEM. There are two types of serpentinites. The brown serpentinite type frequently contains reliquiar minerals (olivine, pyroxene); the serpentine minerals are antigorite and lizardite, with some chrysotile, and the opaque minerals are hematite and magnetite. The green type serpentinite is constituted mainly by serpentines, among which chrysotile is most frequent. The chief opaque mineral is magnetite. The crude fibers are constituted mainly by chrysotile, with minor amounts of magnetite, hematite, quartz or micas. The fibers from pilot-plant and milling plant are established by chrysotile and few amounts of hematite, magnetite, pyroxene and calcite. The study revealed only one asbestiform mineral: chrysotile. It was not found any mineral of the amphibole group, like actinolite, amosite, crocidolite or tremolite.