

## Thermal behaviour of pentagonite and cavansite

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Pentagonite and cavansite are dimorphs of  $\text{Ca}(\text{VO})(\text{Si}_4\text{O}_{10})_4\text{H}_2\text{O}$  (Staples et al., 1973). Thermal behaviour of cavansite is reported by Phadke and Apte (1994) and Powar and Byrappa (2001), but thermal behaviour of pentagonite has not been reported. So we have carried out a differential thermal analysis for pentagonite and cavansite. The three steps of weight loss were observed from TG curves in pentagonite, but in cavansite weight loss was four steps. Dehydration was complete at 350 degrees in pentagonite and at 550 degrees in cavansite. When the product of pentagonite and cavansite heated at 550 degrees had been examined by powder X-ray diffraction, it was dehydrated pentagonite and amorphous, respectively. The results show that pentagonite is steadier than cavansite at 550 degrees.