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**Influence of heating rate on the densification of cordierite**

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Samples of cordierite were prepared by mixing magnesium oxide, alumina, kaolin and silicon dioxide. After the grinding step, the material was melted at 1650 °C to obtain a glassy phase, then the glass was milled and the obtained powder was uniaxially pressed in tablets. Samples were sintered in air at temperatures of 1000 °C, 1100 °C, 1200 °C, 1300 °C and 1350 °C, with soaking time of 30 minutes to the formation of cordierite. Were analysed the heating rates of 10 °C/min and 30 °C/min. The material was characterized by specific mass, porosity and X ray diffraction. The results indicate that the rate of 30 °C/min at 1350 °C leads to a better densification of the sample. The X ray diffraction shows significant formation of cordierite at the temperatures above 1350 °C.