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## **Effect of micronized grinding on the quality of the fillers based on cordierite, mullite and zircon**

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### **Abstract**

This study presents the results of an investigation of high-temperature materials – refractory filler based on cordierite, mullite and zircon for the synthesis of new refractory pattern coating and application in foundry. In order to obtain better properties of refractory fillers, special attention in the research was devoted to the preparation of fillers by grinding and mechanical activation. The application of the fillers for the synthesis of refractory pattern coatings and use in the new EPC casting process for obtained aluminium alloys and steel casting was shown positive results.

**Key words;** filler, talc, mica, cordierite, mullite, mechanical activation, castings