

## **E2-02: Evaluation of performance of a white filler containing silica in tyre tread compounds**

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Research has been carried out in the recent past on reinforcing fillers such as carbon black and silica. This paper describes the results of a preliminary investigation of the use of white filler named as vein quartz powder in tyre tread compounds. The results are compared with those of carbon black based compounds. The effect of a coupling agent such as ethylene glycol on the dispersibility of the fillers was also studied. The dispersibility of white filler was found to increase with increasing level of coupling agent.

Wear resistance of the vulcanizates containing white filler was inferior to that of carbon black vulcanizates. However, the ageing resistance of vulcanizates containing blends of both carbon black and white filler was excellent.