

THE EFFECT OF CASHEW TO THE FRICTION PERFORMANCE OF AUTOMOTIVE BRAKE LININGS

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Abstract:

Brake linings used in automotive disks are usually composed of various components. Expected properties from a brake lining are appropriate standart value of wear resist, friction coefficient and also economical value. Brake lining extremely warms up during braking due to friction. The braking performance of brake lining changes and braking lining is subject to mecanical deformation due to excessive temperature. In recent twenty years in consequence of fast development in automotive technology, vehicles that have more speed and acceleration capability were produced. Therefore, friction composites used in automotive brake gained popularity in material technology.

In this study, the effect of cashew dust in the brake friction material on various aspects of friction characteristics was investigated. Three friction material specimens were produced based on an experimental formulation, and they contained 5%, 10% and 15% cashew dust, respectively, fixing the composition of other ingredients. Tribological properties of the friction materials were obtained using a brake dynamometer. Results showed that the friction materials containing 5% and 10% cashew dust improved friction stability and fade resistance.

Key Words: Cashew dust, brake linings, friction material.