Research on Asbestos of Domestic Automobile Brake Pads

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Abstract

Objective: Asbestos has features of temperature resistance, excellent tribological properties and low cost. Most of the automobile brakes contained asbestos. The process of moving cars and motorcycles resulted in emission of asbestos to the air to endanger human health with the brake friction loss. This study was aimed to research domestic brake pads of non-asbestos organic materials (Non-asbestos organic) and semi-metallic organic friction materials (Semi-metallic).

Methods: We collected car brake pads on the market and then carried out qualitative and quantitative analysis after grinding and sieve crushing with Shimadzu XRD-6000.

Results: We have promoted hard the use of non-asbestos brake pads for the past several years, but some of them still contained asbestos.

Conclusion: We signed a document about non-asbestos on April 20, 2010, but only part of the regulations in Taiwan are restricted, but asbestos still can be found in many products. Human exposure to asbestos hazards should not be ignored.

Keywords: asbestos, brake pads, XRD