

Mandating aftermarket non-asbestos friction materials for vehicles that were originally equipped with asbestos-based linings could lead to a potentially serious customer safety risk, unless stringent friction material qualification specification tests are included.

Issue 4: Pace of Research and Commercialization and Effects on Phase-Out

Non-asbestos friction material technology is advancing rapidly. Several new asbestos-free car, light truck, and heavy vehicle brake systems have been released for OEM applications in the past 3 years. More new vehicle brake systems will be released with non-asbestos friction materials for the 1988 model year.

Adequate non-asbestos friction material formulations presently are not available for all vehicle systems. However, at the present rate of technical progress, most new passenger cars could be equipped with totally non-asbestos frictional systems by 1991, and most light trucks and heavy trucks with S-cam brakes, by 1992. However, a few low-volume new vehicle applications may not have acceptable non-asbestos friction materials at that time. Heavy truck wedge brake blocks, medium truck drum brake linings and many off-road vehicle brake linings may not be developed by 1992.

New classes of non-asbestos friction materials have unique compositions which may have unexpected failure mechanisms. In many cases, unique failure modes are revealed only through extensive vehicle testing.

Numerous automobile, truck, and friction material manufacturers responded with written comments to the Federal Register announcement of the proposed EPA action. While most of the automobile and truck manufacturers were optimistic about the future availability of asbestos-free materials, they were unanimous in their opposition to a proposed phase-down schedule in which the amount of allowable asbestos would be phased out over a 10-year period. Instead, they favored a 5-year lead time prior to any ban. In addition, they were unanimously opposed to banning asbestos-containing materials for older aftermarket vehicles. Although suitable substitutes have been found for automobile front disc brakes, material qualification for rear automobile drum brakes and medium truck drum brakes is still in progress.