SECTION 16 – OTHER INFORMATION

Changes to MSDS from previous issue date are due to:	Changed Clause B under General Guidelines For Brake Service and CAS# for Viterous (silicate) Fibers (soluble amorphous wool) added

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General Guidelines For Brake Service

While most friction materials used for brake service may still contain asbestos, many suppliers are now replacing asbestos with steel, mineral, and/or synthetic fibers. The OSHA regulations refer directly to the asbestos used in friction materials. However, since the long term medical effects of the non-asbestos fibers are unknown, it is suggested that exposure levels be controlled for all replacement friction materials. The OSHA regulations on asbestos exposure emphasize two levels for airborne concentrations of asbestos. These levels determine if the workplace is in compliance with the regulations, and if not, what action must be taken.

A. The Permissible Exposure Level (PEL): 0.1 fiber per cc, 8 hour time weighted average (TWA).

B. Excursion limit. No employee is to be exposed to an airborne concentration of asbestos in excess of 1.0 fiber per cubic centimeter of air (1 f/cc) as averaged over a sampling period of thirty (30) minutes.

1. Always follow the "Work Practices and Engineering Controls for Brake and Clutch Inspection, Disassembly, Repair and Assembly - Mandatory" (29 CFR 1910.1001, Appendix F).

2. Whenever possible, purchase friction materials that are preground and ready for installation. If machining is necessary, there is a possibility that the Permissible Exposure Limit (PEL) for one or more of the ingredients in the friction material may be exceeded. Local exhaust ventilation must be provided so that worker exposures are maintained below the PEL. Local exhaust ventilation consists of dust collection hoods or enclosures connected by ductwork or piping to a pollution control device.

3. In certain grinding operations where concentrations cannot be reduced below the PEL, a respirator program should be implemented. Respirators also may be required during certain maintenance, start-up or emergency situations where engineering controls cannot maintain concentrations below the PEL. The respirator must be one approved by the National Institute for Occupational Safety and Health (NIOSH) for the concentrations encountered.