



MGM Brakes

A Division of Indian Head Industries, Inc.

PRODUCT BULLETIN

SUBJECT: Hexavalent Chromium Replacement

1.0 PURPOSE

To notify customers of coating conversion from current Yellow Zinc Dichromate (hexavalent chromium) to clear trivalent chromate.

2.0 BACKGROUND

Hexavalent chromium is used in surface coatings for corrosion protection in many vehicle components. On February 28, 2006, the U.S. Department of Labor, Occupational Health and Safety Administration (OSHA) issued a final rule concerning Hexavalent chromium. The OSHA directive stated that Hexavalent chromium was a carcinogen and set new limits for exposure to this hazardous material. The European Union's directive 2000/53/EC [1] known as the End of Life Vehicle Directive (ELVD) governs permissible use, reuse, recycling, and recovery of end-of-life vehicles and their components. The objective of the ELVD is to encourage vehicle manufacturers to limit the use of hazardous materials in their products. Hexavalent chromium is one of the materials controlled by the ELVD, which calls for a total phasing out of hexavalent chromium coatings by July 2007.

3.0 SCOPE

Hexavalent chromium is a key component of the yellow zinc dichromate plating used for corrosion protection on clamp bands, clamp band bolts, continuous rings, and other hardware. MGM Brakes will be replacing the yellow zinc dichromate coating on all components with a trivalent zinc chromate.

4.0 TIMELINE

The new trivalent zinc chromate coating will be phased into production beginning in early 2007.

5.0 APPEARANCE

The new coating will be clear or clear with a blue tint.

6.0 CORROSION PROTECTION

The new coating will offer equal or greater salt spray protection when compared to yellow zinc dichromate.