

Announcement:

Crown Technology Ends Production of Hexavalent Chromium Based Yellow Thermoplastic Pavement Marking Materials (TPMM) Over OSHA Raised Health and Safety Exposure Issues

In early 2006, the Occupational Safety and Health Administration (OSHA) issued a final rule reducing the Permissible Exposure Limit (PEL) for hexavalent chromium from 52 to 5 micrograms. While Crown Technology management was confident that systems could be put in place to enhance our current workplace safety measures to comply with the new standard, we remained concerned that proper material controls are lost once the material is purchased and installed. On behalf of our customers, Crown Technology actively petitioned specifying agencies to revise specifications to eliminate the use of lead chromate from yellow thermoplastic pavement marking materials (TPMM). Lead Chromate serves as a source of hexavalent chromium in our industry.

All manufacturers of TPMM, including Crown Technology, offer alternative products that are as effective as those containing lead chromate. Lead-Free TPMM have a long, successful history in our industry and is a matter of record that all can review. While it has been suggested by some that double-encapsulated lead chromate offers a suitable escape from the new OSHA standard, we respectfully disagree. The OSHA final rule on exposure raises some valid concerns regarding the benefits of double encapsulation in the manufacturing and installing part of the product lifecycle. The following excerpt reflects Crown Technology's concerns:

A number of questions remain unanswered regarding encapsulated Cr(VI) [hexavalent chromium] and bioavailability from the lung. There is a lack of detailed information on the efficiency of encapsulation and whether all of the chromate molecules are encapsulated. The stability of the encapsulated product in physiological and environmental conditions over time has not been demonstrated. Finally, the fate of inhaled encapsulated Cr(VI) in the respiratory tract and the extent of distribution in systemic tissues has not been thoroughly studied (29 CFR Parts 1910, 1915, et al. Occupational Exposure to Hexavalent Chromium; Final Rule Page 10109.)

As a point of fact, Crown Technology has used double-encapsulated lead chromate in the past as required by some State agencies. Crown Technology feels strongly that double-encapsulated lead chromate only serves to conceal the problem of hexavalent chromium exposure in manufacturing and application scenarios and is therefore not an effective solution in eliminating exposure concerns for the lifetime of TPMM. During the lifecycle of the applied

TPMM, and especially during the removal of TPMM, the risk of hexavalent chromium exposure once again becomes apparent, despite using a double-encapsulated lead chromate.

Many States that had allowed/required yellow thermoplastic pavement marking materials containing lead chromate have taken measures to address this issue and eliminate the material due to exposure concerns. These State agencies now specify a lead-free yellow pigment be used in TPMM. Unfortunately, a few State agencies have not switched to lead-free pigmented TPMM and still allow/require yellow TPMM containing lead chromate. Crown Technology has and will continue to use every resource at our disposal to see that lead chromate is eliminated once and for all in TPMM. We urge our customers who currently work in States that allow/require the use of TPMM containing lead chromate to join Crown Technology in actively petitioning their respective State specifying agencies to change their specifications to allow/require only lead-free yellow pigments to be used in TPMM.

On February 1, 2008, Crown Technology ceased production of TPMM containing lead chromate. This decision was made foremost out of concern for the health and safety of our employees, customers, and all others who come into contact with our products. In our judgment the continued use of lead chromate places a highly unnecessary risk on our industry as a whole.

If Crown Technology can provide any further information with regards to this matter, please contact Mr. Joe Winters, Technical Manager, Crown Technology, at (706) 553-9500.

Sincerely,

Jimmy Teal President