TECHNICAL BULLETIN



Heavy Metal Based Pigments Including Lead and Cadmium

More and more paint companies are moving away from the use of heavy metal-based pigments. A maximum lead content level was established for residential coatings in 1977 by the US Consumer Product Safety Commission, and the level has been reduced further in recent years. In addition, the EPA and the American Coatings Association have begun to work together to reduce the use of "Priority Chemicals".

These efforts are voluntary and non-regulatory. The EPA's Office of Resource Conservation and Recovery has generated a list of 31 chemicals that are targeted for elimination, reduction, or substitution because of their toxicity and their tendency to accumulate in the body. Lead and cadmium are two of the chemicals identified that have been used widely in the past by the coatings industry.

Lead and cadmium, when combined with other elements, can form bright yellow, red, green and blue pigments. In addition to providing bright colors, these heavy metal-based pigments can be very durable. These bright colors can also be generated using organic pigments; however, these tend to be less durable. Mitsubishi Chemical America, Inc. in the past, has been requested to provide very bright color matches with a

request for extended warranties. The options are to provide a formulation with the lead-based pigments or a more subdued color with stable organic pigments.

Mitsubishi Chemical America, Inc recognizes the health risks associated with the use of lead-based pigments and, to date, has never produced a finish in which a heavy metal based pigment was used. To provide the best color matches and finishes possible to our customers, the most durable pigmentations available which are not based on heavy metals have been utilized.

Moving forward, we will strive to find alternatives to the use of heavy metals including lead and cadmium. The introduction of such formulations, using heavy metal-based pigments, will require a stringent review by the senior management of Mitsubishi Chemical America, Inc. and our paint suppliers.

Need assistance?

Contact our on-staff Technical Support Team by calling 800.422.7270 or by emailing them at technicalservices@alpolic.com