

Lead-Free Coatings from PPG Recognized by EPA for Green Chemistry

WASHINGTON, July 23 -- PPG Industries was recently awarded the Presidential Green Chemistry Challenge award by the U.S. Environmental Protection Agency for the lead-free technology used in the POWERCRON 8000 electrodeposition coatings. PPG earned the award in the Designing Safer Chemicals category for its discovery of replacing lead with yttrium in its electrodeposition coatings. The POWERCRON 8000 lead-free coatings use this patented technology and are specially formulated to meet the needs of the industrial coatings market.

The coatings provide corrosion protection and a smooth surface for painting a variety of products including automotive and truck parts and components, agricultural and construction equipment, and household appliances. Before this breakthrough in technology, electrodeposition coatings contained lead salts and pigments to provide corrosion resistance properties.

In addition to eliminating lead, the coatings contain no heavy metals or hazardous air pollutants throughout the finishing process. The coatings enable customers to eliminate chrome from rinses and use low-nickel or potentially nickel-free pretreatments. These coatings also significantly reduce the emissions of volatile organic compounds.

"The POWERCRON 8000 lead-free coatings not only improve upon the environmental performance, but may also surpass the corrosion resistance of products using traditional coatings that contain lead," said Michael Ludlow, PPG vice president of industrial coatings. "It is the first lead-free coatings product that outperforms lead-containing coatings products for corrosion prevention."

The coatings also feature a lower curing temperature, which improves energy efficiency. J. Rich Alexander, general manager of PPG general industrial coatings, said, "The POWERCRON 8000 lead-free coatings enable customers to save on energy costs, which is especially advantageous now that energy prices are higher than in the past."

Development of this product is particularly significant in light of recent requests to eliminate lead from products in various industries. For example, automotive companies have been directed to eliminate use of lead in the manufacture of vehicles by 2003. John Martin, global marketing manager for PPG electrodeposition coatings, said, "As automotive parts suppliers come into compliance with the new lead-free regulations, they can also improve their operational efficiency with POWERCRON 8000 lead-free coating."

Established in 1995, the Presidential Green Chemistry Challenge Awards recognize individuals and organizations for outstanding accomplishments in the research, development or implementation of technologies that reduce pollution. An independent panel, selected by the American Chemical Society, judges the nominations in five categories.

PPG is the world's leading producer of transportation coatings and a major global supplier of industrial and packaging coatings, flat and fabricated glass, continuous-strand fiber glass and chemicals. It is also a leading North American supplier of architectural paints. PPG's sales exceeded US\$8.6 billion last year.

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