



Cytec Helps Paint Customer Reach New Low-VOC Limits

A mid-sized manufacturer of architectural coatings for contractors asked Cytec to help it develop a waterborne trim enamel equal in performance to its industry-standard, solvent-based alkyd trim enamel, but with a VOC of less than 50 g/l.

The customer, based in the Southern California market, was challenged by new VOC limits for architectural and industrial maintenance coatings which were scheduled to take effect in July 2007, and which would have a substantial impact on manufacturing and profits industry-wide.

Early in 2006, Cytec's team of research and technical development scientists moved forward with developing a formula that would exceed the customer's expectations.

The team's starting point was one of Cytec's other high-performance, liquid coating resins. After testing it, the team found that this resin fully met the 50 g/l limit, but was not 100% airless-sprayable as the customer required for this specific application.

Leveraging a product development project for trim paints, Cytec's team developed a new prototype to sample, and anticipated it would meet the customer's objectives.

The innovative waterborne alkyd emulsion indeed fully met the new 50 g/l VOC requirement, and achieved performance properties very similar to the customer's commercial solvent-based alkyd system. Additionally, it sprayed successfully, had better scrub resistance, and significantly faster drying time.

The customer tested the new product with an initial group of contractors, and received an overwhelmingly favorable response! The contractors were able to apply two coats of paint in one day instead of two, translating into savings in project time and overall cost.

Seeing a great business opportunity, the customer suspended the rest of the field tests, and placed commercial orders for the new, RESYDROL[®] AY 588w/42WA waterborne core-shell alkyd emulsion.

Revenue-wise, the customer has enjoyed increased sales from contractors who are now using the new low-VOC paint formulated with Cytec's innovative emulsion.

Market-wise, the customer believes it is far ahead of its competitors in Southern California, thanks to its high-performing, low-VOC gloss and semi-gloss paints.

The customer's future now looks green, in more ways than one. It is currently stocking the shelves with the new products in all of its 45 retail stores, and building new display areas showcasing its low-VOC/eco-friendly products.

Cytec provides the innovation formulators and manufacturers are looking for today. With our strong research, technical and manufacturing resources, Cytec is ready to deliver value-added solutions—technology ahead of its time—on both a regional and global basis.