Informex Show Daily #1 (January 30)
Supporting Innovation in Computer Chip Memory at the Chemical Level
Halocarbon Products Corporation Optimizes Hexafluoroacetone Chemistry
With Commentary by Ronald Epstein, Director of Sales & Marketing
Word Count: 510

Advancing the Capability of Memory Chips with Novel Chemical Technology

Halocarbon Products Corporation Optimizes Hexafluoroacetone for Compounders

In the fast moving world of high technology, the chemical industry is seen as an important participant in the development of technologies that kick-start improvements in the performance of electronic components. Halocarbon Products Corporation is one such participant, having stepped into the electronic chemicals market a few years ago to help compounders optimize the use of fluorine chemistry in coatings for photo resists. It all started with a call from a compounder who had questions about fluorine monomers. In substituting a standard carbon molecule with a fluorinated monomer, the compounder found finished coatings delivered a set of physical properties that far exceed ordinary carbon materials. The finding helped significantly in the quest for better, faster and more efficient memory chips. Yet the compounder needed a company with the capability to produce the molecule in a way that did not adversely affect other components within the coating.

Enter Halocarbon Products Corporation, a custom manufacturer with expertise rooted in hexafluoroacetone. The 57 year old company traditionally serves the agricultural and pharmaceutical markets – where a direct correlation often exists between price and volume - yet it made a calculated decision to support a low volume opportunity in the electronic materials market, given that the industry assists in the production of high-value technologies. The decision, which proved to be the right one for Halocarbon Products Corporation, effectively changed the way the company looks at small volume opportunities.

“At Halocarbon, our business is now driven primarily by marketplace needs rather than volume requirements,” said Ronald Epstein, Director of Sales and Marketing. “Our research division is completely focused on what customers require to move their products to the next level of performance. We do not design products and look for buyers, instead, we serve customers who need chemical technologies produced in such a way that it helps them to deliver innovative products like advanced coatings for photo resists,” he said.

Following the initial success with the electronic coating compounders, Halocarbon Products Corporation received additional calls from the industry, with questions like: Can you modify the molecule? Can you make it longer? Can you move a hydroxyl group to another location? All of these questions, according to Epstein, come from an electronics industry that is continually challenged to improve upon the capability of memory cards.

“Consumers receive a lot more memory for a lot less money than five years ago,” he said. “It comes as no surprise that everyone involved in the electronics industry is working on the premise that to succeed going forward, innovation must come first.”

Halocarbon Products Company works on the foundation that innovation – regardless of the market – is good for the chemical industry, even if the total volume requirement is less than10 metric tons per year.

“In the past, we shied away from small volume custom chemistry opportunities, but today, if an opportunity comes along that fits with our chemistry, we’ll take a good look at that opportunity,” Epstein said. “As it happens, the electronic chemicals market parallels the pharmaceutical industry in many ways because of the high quality and consistency expectations. This is exactly the way Halocarbon Products is set up to produce,” he said.

Halocarbon Products Company manufactures fluorine products at its cGMP facility in North Augusta, South Carolina. Established in 1950, the privately held company employs 150 people.

# # #