

LEADING JOURNAL FOR THE COATINGS INDUSTRY IN EUROPE AND THE MIDDLE EAST

PPCJ

POLYMERS PAINT COLOUR JOURNAL

VOL 208 - NO 4644 SEPTEMBER 2018

Inside: **TiO₂ Buyers' Guide**

Inside: **Polyamide thickeners**

È un mondo colorato

Focus on Italian coatings market

ADDITIVES • WATERBORNE • TEST & WEATHERING • ADHESIVES & SEALANTS • PROTECTIVE

Cortec additives integrate many technologies along with proprietary VpCI® chemistry in order to eliminate corrosion caused by corrosive fluids, chlorides or humid environments.

Helping prevent corrosion one molecule at a time!

For the last 40 years the Cortec Corporation has provided world class corrosion solutions for industries across the globe. The Company delivers cost-effective, user friendly integrated solutions for corrosion problems in various industries and today is a global leader in innovative, environmentally responsible VpCI® corrosion control technologies.

While Cortec has developed 100s of innovative corrosion inhibiting products, its additives line focusses on corrosion inhibitors that manufacturers or industrial users can add directly to their own products or systems for enhanced metal protection. Cortec additives provide excellent contact protection with additional vapour phase protection for metals in void spaces. When introduced to a void space, VpCI molecules in these additives vaporise and diffuse throughout the enclosure and adsorb on metal surfaces. This thin molecular, hydrophobic layer protects the metal against corrosive elements, such as oxygen, moisture and chlorides.

Markus Bieber, Cortec's Director of Sales – High Performance Coatings & Additives, feels there is a tremendous potential for these additives in the market: "Formulators are being pressured more and more to provide better performance while reducing environmental impact. As traditionally used corrosion inhibitors are being phased out due to health and environmental concerns, the market needs solutions which work," stated Mr Bieber.

■ USED IN MULTIPLE INDUSTRIES

Coatings and Paints (plus inks): These additives for waterborne and solvent-based coatings provide corrosion protection for ferrous and non-ferrous metals. They offer a new world of protection possibilities as VpCI technology offers protection at very low dry film thicknesses. VpCI coating additives show excellent performance with low viscosity and can be easily blended into the product at any stage of manufacturing. They cover systems, such as acrylics, urethanes, epoxies, alkyds and more.

Lubricants and Greases: Cortec's full line of additives offers versatile corrosion inhibitor packages for both solvent- and oil-based lube and grease systems. A common misconception is that oil-based products are naturally strong rust preventatives. While oil itself can help displace moisture, a good corrosion inhibiting additive can significantly increase protection of lube and grease systems.

Water Treatments: Protecting other water systems is an important step for in-process maintenance and protection during seasonal layup. Rather than using more hazardous treatments, Cortec's additives include several "greener" or lower toxicity alternatives to effectively protect and maintain equipment.

Fuels, Crude Oil, and Natural Gas: Industries often require the use of large and small fuel storage tanks and systems. However, this raises concerns about fuel separation and corrosion of new equipment fuel tanks during shipping and storage. Natural gas and crude oil gatherings are also understandably at risk for corrosion through the harshness of the elements flowing through them. Cortec's fuel additives help alleviate these problems with a variety of additives to provide corrosion protection and stability. Vapour phase protection is especially valuable when fuel runs low in tanks or needs to be kept to a minimum for simpler, more cost-effective storage and shipment.

Metalworking and Hydraulic Fluid: Incorporating corrosion inhibitors directly into metalworking and hydraulic fluids enhances corrosion protection and streamlines the process to avoid significant economic losses from corrosion damage. There is a variety of additives for use with oil, water-based, and synthetic metalworking and hydraulic fluids protect metal pieces from flash corrosion during the metalworking process, while also providing protection to the cutting and machining equipment.

■ DEMONSTRATING EFFECTIVENESS OF ADDITIVES TECHNOLOGY

A major coatings manufacturer was not satisfied with its stabilising primer for roof preparation. The primer was used as a stabiliser for rust and paint on metal roofs before an elastomeric roofing system was installed.

The manufacturer needed a solution to its corrosion problems while meeting VOC regulations and not detracting from the superior adhesion properties, flexibility and other important properties in the primer.



Because of the elastomeric nature and high adhesion of the primer, the manufacturer chose Cortec M-380 Additive. The properties of the additive suggested the possibility of carboxylic functionality along the resin's backbone, which meant M-380 would bond easily with the primer.

The result was Cortec additives increased the performance of the primer dramatically.

For more information, please visit www.cortecvci.com

PPCJ