Market Place

Novel products

Coatings provide corrosion resistance without toxic materials



A new waterborne coating from Cortec gives multi-metal protection against corrosion for outdoor applications. "CorShield VpCI-386 HP" has a new "Nano-VpCI" formulation containing a mixture of non-toxic organic inhibitors and pigments – providing an alternative to zinc-rich primers and paints. The nanoparticle composite polymer barrier retards the reaction of metal ionisation by ion scavenging and passivation. The product is quickdrying, UV-resistant when dried and nonflammable. The clear coating allows metal substrate coatings to be inspected visually. It can be applied by spray, roller, brush or dip.

Cortec Corporation US-St Paul info@cortecvci.com www.cortecvci.com

Special-effect copper shades contain no copper

BASF has brought out effect pigments that produce copper shades without using copper. "Lumina Royal Copper" is a coated mica that has copper effects with good levels of chroma and soft glitter effects; "Paliochrom Brilliant" combines high levels of chroma and good hiding power with a bright glitter effect; and the vacuum-metallised aluminium pigments in the "Metasheen" line give mirror-like metallic effects.

BASF SE DE-Ludwigshafen global.info@basf.com www.basf.com

Hybrid emulsion makes surfaces "slippery"

Nissin Chemical of Japan and Shin-Etsu MicroSi of the USA have introduced two new groups of products intended for the manufacturing of paints, inks, adhesives and films. The "Chaline" series is a hybrid emulsion that offers the surface activity of a silicone resin and the filmforming ability of acrylic resin, making surfaces feel slippery. It is a silicone-rich, silicone/acrylic composition which can be used in vehicle upholstery, auto parts, electrical wires and hoses. and floors and flooring wax. The "slipperiness" also improves wear resistance and reduces noise such as vibrations and squeaks. Another new line is the "Olfine" series of surfactants, which are designed for waterborne systems and provide wetting and defoaming simultaneously. They can also be used as a dispersing agent for organic and inorganic pigments.

Shin-Etsu MicroSi Inc. US-Phoenix info@microsi.com www.microsi.com

LED lamps allow irradiation of irregular shapes



Delo has launched a range of new LED lamps. The "Delolux 20" and "202" area lamps have a wavelength of 365 nm. They can be set up in arrays of almost any size and shape, and the compact heads make them suitable for integration into production lines. The "Delolux 50 x4" spot lamp, previously only available at 365 nm, now comes in a 400-nm version. The new LED head can transmit through plastics such as PMMA, PC or PA which are opaque to short-wave UV light, so it is now possible to cure adhesive layers up to 10 mm thick. The base unit has connectors for up to four heads; their intensity is individually controllable, so multiple bonding areas can be irradiated independently. Maximum intensities are 2000 mW/cm², and large spot diameters can reach 10 mm.

Delo Industrial Adhesives DE-Windach info@delo.de www.delo.de

Anti-corrosive coating offers heat resistance to 650 °C

A new product in Hempel's "Versiline" range provides corrosion protection under insulation, heat resistance and ease of application. "Versiline CUI 56990" is suitable for use on carbon or stainless steel – such as pressurised piping and equipment under insulation – for both new builds and building maintenance. It withstands conditions ranging from cryogenic to elevated temperatures up to 650 °C. Its hardness and adhesion provide protection against physical impact, which is important for new building, and ensures that minimal damage is caused during transport and installation. Already available in North America, the product is to be launched globally in the near future.

Hempel A/S DK-Lyngby hempel@hempel.com www.hempel.com

Biocide-free foul release technology to fight slime

The first biocide-free foul release fluoropolymer technology aims at the issue of slime fouling on ships' hulls. The new product works by resisting the adhesion and settlement of the organisms that produce slime colonisation. It provides macro and micro fouling control with improved static resistance even in warm waters – resulting in reduced drag, improved fuel efficiency and reduced CO, emissions.

Akzo Nobel N.V. NL-Amsterdam info@akzonobel.com www.akzonobel.com

Additive increases surface energy of cured coatings

"Byk-3560" is a new additive based on macromer technology. It increases the surface energy of cured coatings, improving adhesion in subsequent layers – whether paints, lamination foils, adhesives or printing inks. Suitable for waterborne, solventborne, UV-curable and high-solids systems, it also improves wetting and levelling in subsequent layers, but does not affect surface tension in the liquid coating.

Byk-Chemie GmbH DE-Wesel info@byk.com www.byk.com

Novel products

Powder thickness gauge is compatible with complete range of probes



DeFelsko, the US manufacturer of coating thickness gauges and inspection instruments, has announced the latest addition to its range of non-contact powder thickness gauges. The "PosiTector PC Powder Checker" measures uncured powder coatings using ultrasonic technology to automatically calculate and display a predicted cured thickness. This helps to control powder consumption to ensure adequate coverage and reduce waste. The new instrument comes with a colour LCD and expanded internal memory, and works with the manufacturer's "PosiSoft Solutions" software. This latest unit accepts all "PosiTector" probes, converting from measuring uncured powder to cured dry film thickness or surface profile, so the same gauge body can be used to measure coatings before and after curing.

DeFelsko Corporation US-Ogdensburg techsale@defelsko.com www.defelsko.com

Two defoamers offer formulators a choice

From Emerald Specialities Group come two new 100 % active defoamers for use in aqueous and energy-curable coatings. "Foam Blast 4213" is an organo-modified silicone synthetic antifoam product, while "4149" is a synthetic block copolymer developed as a non-silicone alternative. Both provide initial and long-term foam control for systems such as interior and architectural coatings and flexographic inks, enabling foam-related defects such as craters and fisheyes to be avoided. They are low-VOC and APEO-free and can be added at levels as low as 0.2 to 0.6 %.

Emerald Performance Materials LLC US-Cuyahoga Falls efctechnicalservice@ emeraldmaterials.com www.emeraldmaterials.com

Dispersant for solventborne pigment inks is suitable for food packaging

"Tego Dispers 690" is a dispersant from Evonik which has been designed specifically for solventborne printing inks used in food packaging. The ingredients in this wetting and dispersing additive are completely compliant with the A list of Swiss Ordinance SR 817.023.21, Annex 6. The product enables high pigment loadings to be achieved due to viscosity reduction. It is compatible with various PU and NC binder types and works

6-functional urethane acrylates are PETIA- and organotin-free

Miwon has developed a new range of 6-functional urethane acrylates which are both PETIA-free and organotin-free. "Miramer PU6140NT", "PU6510NT" and "PU6530NT" are aliphatic urethane acrylates, while "Miramer PU6520NT" is an aromatic urethane acrylate. All have significantly lower viscosity than earlier 6-functional products such as "Miramer PU610". In tests with the drop shape analyser they display less curl.

Miwon Europe GmbH DE-Straelen sales.eu@mwc.co.kr www.miramer.com well with organic pigments, carbon blacks and titanium dioxide. It is especially effective in gravure and flexo inks for lamination applications.

Evonik Industries AG DE-Essen info@evonik.com www.evonik.de

Emulsifier for VOC-free epoxy coatings

Waterborne epoxy coatings are gaining share in the coatings market due to their benefits in use and their environmentally friendly profile. Croda Coatings & Polymers has introduced "Maxemul 9107", a non-ionic polymeric surfactant that enables the formulation of o/w epoxy emulsions with excellent tropical storage stability. Its versatility makes it suitable for applications such as floor coatings, wall paints and metal protection systems, and it has no negative effects on dry film properties. The manufacturer has developed a series of epoxy emulsion starting formulations to demonstrate its ease of use.

Croda Coatings & Polymers DE-Nettetal coatingsandpolymers.eu@croda.com www.crodacoatingsandpolymers.com

Green bismuth vanadate offers multiple properties

A new green bismuth vanadate, "Vanadur 2108", has been developed as part of the existing "Vanadur" range. Its chief feature is a combination of very high tinting strength and good hiding power with high durability, chroma and dispersibility. The high tinting strength opens up new opportunities for the formulation of decorative, industrial, powder, coil and automotive coatings. Its zinc-free technology means it is environmentally sound.

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