

PRESS RELEASE

Number 7

EUROPEAN COATINGS SHOW 2011: WACKER Introduces New Silicone Intermediate and Cost-Effective Coating Resins for Modern Industrial Coatings

Munich, February 10, 2011 – The Munich-based WACKER Group's presentation at the European Coatings Show (ECS), taking place in Nuremberg from March 29 through March 31, 2011, will among others include new products for industrial coatings. True to the slogan, "Our \oplus in Expertise," WACKER will introduce its new intermediate, SILRES[®] IC 368, a liquid, solvent-free silicone resin for highly weather-resistant coatings. Another innovation to be presented at the show is VINNOL[®] H 30/48 M, an purely ester soluble coating resin that serves as a versatile yet cost-efficient binder for heat-sealed closure systems such as pharma and food packaging.

A painted surface is usually composed of several layers: The first of these is the base coat. This is followed by fillers and the coloring layer. Finally, the top coat is applied. The top coat is of particular importance: as the uppermost layer, it determines the mechanical and chemical resistance of all the layers, as well as the gloss and color of the paint. Over time, solar radiation, oxygen, rain and air pollutants, as well as changes in temperature, can damage the top coat severely. That not only makes it unsightly, it also takes away its protective function.

At the ECS, the Munich-based chemical company, WACKER, will be presenting a solvent-free silicone resin intermediate that will significantly improve the protection and durability of coatings. Recently introduced to the market under the name SILRES® IC 368, the new silicone resin is formulated in such a way that an addition as small as 15 percent can enhance the UV and weather resistance of the organic binder in the coating system without impairing its mechanical properties. Weathering and laboratory tests show that SILRES® IC 368 can deliver much improved gloss retention, greater protection against weathering and a longer lifespan. Moreover, the temperature resistance of the coating system is improved.

SILRES® IC 368 is a low viscosity liquid that can be processed without organic solvents. Cooking it with equal parts alkyd and silicone resin reduces the viscosity as much as threefold compared with solid silicone resins. SILRES® IC 368 thus facilitates the preparation of combination resins with extremely high solids content and sufficiently low viscosity. These can be used in applications such as low-solvent, high-solids topcoats.

The new intermediate is versatile. It can be used to modify alkyd resins, hydroxyl-functional acrylic resins and hydroxyl-functional polyesters commonly used for the industrial coating of wood and metal or for coil coatings. The new silicone resin also sets standards in effectiveness: using comparable amounts, makers of binders can achieve far greater effects with SILRES® IC 368 than has been possible with silicone intermediates until now.

VINNOL® H 30/48 M: versatile and cost-efficient

The VINNOL® line by WACKER offers a wide range of vinyl chloride and vinyl acetate copolymers with and without functional groups, which permits a wide range of applications. At the ECS, WACKER is highlighting VINNOL® H 30/48 M, a coating resin with carboxyl groups. Its strength is its excellent solubility in pure esters, which enables the formation of clear, colorless solutions without any use of ketones whatsoever. The result is a flexible set of applications as well as cost savings through reduced raw material costs. Due to the higher amount of vinyl acetate in the polymer backbone, the product can be sealed even at low temperatures. That is why VINNOL® H 30/48 M is perfect for packaging heat-sensitive foods such as cheese or yogurt.

Excellent adhesion to aluminum, high chemical resistance and low-temperature thermal activation combine to make VINNOL® H 30/48 M the ideal binder for use in heat-sealed closure systems, particularly in the area of food and pharmaceutical packaging.

All VINNOL® grades can be combined with each other, allowing for fine adjustment of the paint or ink to the specific requirements of the application as may be necessary for the formulation of gravure and screen printing inks, for inkjet inks, and for metal or metalized substrates such as heat-sealing coatings. Additional applications include plastic coatings, wood varnishes and adhesives.

Visit WACKER at the European Coatings Show 2011 in Hall 9, Booth 417.



Included in WACKER's presentation at ECS 2011 is the liquid silicone resin SILRES® IC 368 for the formulation of weather-resistant coatings. Gloss measurements show that the solvent-free intermediate significantly improves the durability of coatings (photo: Wacker Chemie AG).



A cost-effective, versatile binder: the new paint resin VINNOL® H 30/48 M is ideal for heat-sealed closure systems in heat-sensitive foods such as yogurt or cheese (photo: Wacker Chemie AG).

Note:

*These images are available for download at
<http://www.wacker.com/pressreleases>*

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The company in brief:

WACKER is a globally active chemical company with some 15,600 employees and annual sales of around around €3.7 billion (2009). WACKER has 26 production sites and over 100 sales offices worldwide.

WACKER SILICONES

Silicone fluids, emulsions, rubber and resins; silanes; pyrogenic silicas; thermoplastic silicone elastomers

WACKER POLYMERS

Polyvinyl acetate and vinyl acetate copolymers in the form of dispersible polymer powders, dispersions, solid resins and solutions used as binders for construction chemicals, paints, adhesives, coatings and nonwovens, as well as in polymeric materials based on renewable resources

WACKER BIOSOLUTIONS

Biotech products, such as cyclodextrins, cysteine and biologics, as well as fine chemicals and polyvinyl acetate solid resins

WACKER POLYSILICON

Polysilicon for the semiconductor and photovoltaics industries

Siltronic

Hyperpure silicon wafers and monocrystals for semiconductor devices