

PRESS RELEASE

Number 34

ABRAFATI 2009

WACKER Showcases Innovative Fragrance Complexes, Water-Repellent Silicone Resins and Solvent-Free Binders for the Paints and Coatings Industry

Munich, September 3, 2009 – Under the “Inspired by Excellence” motto, the Munich-based WACKER Group will present sustainable product solutions from its areas of expertise in coatings and construction at ABRAFATI 2009 – the 11th international tradeshow for suppliers to the paints and coatings industry. The focus is on fragrance complexes for innovative coatings, and pyrogenic silica for controlling powder flow and rheology of coating materials. Other focal points include silicone resin emulsion paints for the lasting protection of buildings, and user-friendly binders that are free of ammonia, plasticizers and solvents for indoor and outdoor paints. ABRAFATI 2009 will take place from September 23-25 in São Paulo, Brazil.

WACKER has developed a system that, despite their high volatility and chemical sensitivity, enables fragrances to be used effectively in building applications. Cyclodextrins play the key role here. Cyclodextrins are non-reducing chiral sugars, whose molecules are made of several glucose building blocks linked into a ring. They are arranged so that they have a lipophilic cavity (i.e. one with an affinity for fat) in their interior.

This cavity can receive another lipophilic molecule as a "guest", provided it is of the appropriate size and shape. The cohesion between the two molecules is relatively weak, enabling the guest molecule to be released again under suitable conditions, e.g. by atmospheric humidity. This ability to enclose other substances reversibly makes WACKER's cyclodextrins invaluable in many products and industries, such as household and personal care, pharmaceutical and cosmetic preparations, textiles and foods.

At ABRAFATI, WACKER will present an innovative construction application for these ring-shaped sugar molecules. In wall paint formulations, for example, cyclodextrins release sensitive actives at a controlled rate once the coating material has dried and set. Thus, for the very first time, essential oils and other fragrances can be used in various non-hydrophobic construction applications, such as floor coverings, plasters, paints, fillers and other coatings and sealants.

HDK[®] Pyrogenic Silica Controls the Flow of Liquid and Powder Coatings

Pyrogenic silica is produced by the hydrolysis of volatile chlorosilanes in an oxyhydrogen flame. This yields a high-purity, amorphous silicon dioxide powder, which WACKER has been marketing under the HDK[®] tradename for many years. Besides its high purity, HDK[®] pyrogenic silica is also characterized by the very large specific surface area of its particles. This is responsible for the substance's wide range of technologically attractive properties.

HDK[®] applications include rheology control of coatings and printing inks, adhesives and sealants. In the formulation of low-solvent

coatings (high solids), such as for automotive coatings and solvent-less and water-based systems, HDK[®] pyrogenic silica offers selective control over coating thickness and leveling. Moreover, it improves the storage stability of the systems by effectively preventing pigment and filler sedimentation. In clear coats, HDK[®] pyrogenic silica ensures high transparency.

Silicone Resin Emulsion Paints Protect Facades against Water and Dirt Pick-Up

Water is the natural enemy of every facade. Damage caused to buildings across the world by water penetration and damp walls can run into millions of euros. This category of damage and its associated costs can be prevented by using silicone resin emulsion paints (SREP).

Silicone resins form a protective cover of filler and pigment with the outer plaster coat. The cover consists of water-repellent capillaries and pores. It not only protects the facade against water ingress, but at the same time allows water vapor to escape from the masonry. Dry walls aren't the only benefit. Without water, less algae and fungal pores penetrate into the wall and fewer dirt and soot particles accumulate.

SREPs are often more expensive to purchase than traditional exterior paints, but they also last much longer. On average, the use of well-formulated SREPs doubles the life of a facade renovation.

Furthermore, high-quality SREPs can help save energy as they keep facades dry and provide lasting protection for the insulation.

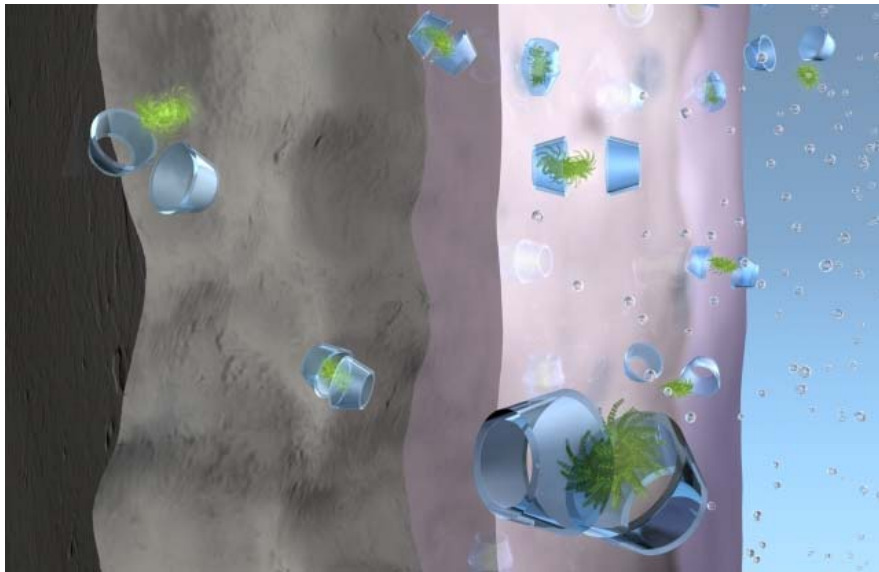
VINNAPAS® VAE for Indoor and Outdoor Paints

WACKER produces a variety of different aqueous, solvent-free vinyl acetate/ethylene (VAE) dispersions. These are free of formaldehyde and plasticizers, and have an extremely low volatile organic compound (VOC) content.

VINNAPAS® VAE dispersions not only lend themselves to developing odor-free indoor paints, they also enable the formulation of decorative outdoor paints. Furthermore, VAE dispersions have proven their worth as binders for the adhesives and sealants industry.

VINNAPAS® 426 and VINNAPAS® 920 grades display excellent adhesion even to difficult substrates. High solids such as VINNAPAS® 465 and VINNAPAS® 7200 are additionally characterized by extremely fast setting.

Visit WACKER at ABRAFATI 2009, Hall L/M, Booth 108.



Model of cyclodextrin/fragrance complexes in wall paints. The ring-shaped sugar molecules can host fragrances in their inner cavity. Activated by moisture, they are released to their surrounding in a controlled manner. (photo: Wacker Chemie AG)



HDK[®] pyrogenic silica from WACKER. Among the many applications of this high-purity powder are rheology control, reinforcement of silicone elastomers, silicon wafer polishing and thermal insulation materials. (Photo: Wacker Chemie AG)



Silicone resins form a protective cover of filler and pigment with the outer plaster coat. The cover consists of water-repellent capillaries and pores. It protects the facade against water ingress.

Note:

You can download these pictures at:
<http://www.wacker.com/pressreleases>

For further information, please contact:

Wacker Chemie AG
Media Relations & Information
Florian Degenhart
Tel. +49 89 6279-1601
Fax +49 89 6279-2877
florian.degenhart@wacker.com

The company in brief:

WACKER is a globally active chemical company with some 15,900 employees and annual sales of around €4.3 billion (2008).

WACKER has 27 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 and solid resins used as binders for construction chemicals, coatings, adhesives, paints, plasters and nonwovens

WACKER FINE CHEMICALS

Fine chemicals, biologics and other biotech products such as cyclodextrins and cysteine

WACKER POLYSILICON

Polysilicon for the semiconductor and photovoltaics industries; solar wafers

Siltronic

Hyperpure silicon wafers and monocrystals for semiconductor devices