

Solvay to Showcase its Market-Focused Specialty Polymers Expertise at Chinacoat 2014

*Sustainable High-Performance Materials for a Rapidly Changing Industry:
Waterborne PVDC Polymers for Anti-corrosion Coatings,
Waterborne PVDF Technology for Architectural- and Industrial Coatings, and
Functionalised PFPE Technology for Smart Coatings with Self-Healing Properties*

Guangzhou, PR China, December 3, 2014 – Solvay Specialty Polymers is taking the opportunity of the Chinacoat 2014 trade fair to highlight the company's advanced and innovative solutions for some of the most critical challenges facing the coatings market in Greater China and beyond. Amongst others, new Chinese VOC emission regulations will drive the industry's change from solvent to waterborne coating systems, high solids and powder coating systems contributing to both further growth and a healthier environment. Customers are increasingly demanding materials that will provide significantly enhanced sustainability without compromising processability and in-use performance.

"Climate change, health, and resource scarcity are governing key megatrends in the chemical industry, and access to innovative raw material technology helps coating formulators to stay in front of market requirements," explains Dr. Luke Du, General Manager of Greater China & Southeast Asia for Solvay Specialty Polymers. "We are determined to bring in our expertise in high-performance specialty polymers that will help customers in the Asia-Pacific region to meet and master the challenges of tomorrow's coatings market, today," he added.

Solvay offers a wide portfolio of innovative specialty polymers for more sustainable and "green" coatings. One example is Diofan® HBP, a range of water-based (PVDC) polymers targeting, for instance, the requirements of the marine- and protective coatings industry. The innovative step is the switch from a solvent and zinc based three-layer coating to a waterborne and zinc-free two-layer solution. As a cost-efficient primer in container coating systems, waterborne Diofan® HBP provides best-in-class metal corrosion protection, including category C5-M compliance for use in exterior coastal and offshore areas with high salinity. Excellent barrier performance can also be achieved in single-layer protective coatings. In addition, the absence of plasticizers and any alkylphenol ethoxylates (APE) addresses major environmental and health concerns. Diofan® HBP is also approved for the use and contact with potable water. It is a Bisphenol A (BPA) free high barrier polymer and a new alternative for BPA containing epoxy polymers.

Other important drivers for market change in China are current targets, initiatives and actions for improving air quality, including severe penalties raised in the event of non-compliance. High-barrier waterborne Diofan® P520 and P530 polymers from Solvay can make a significant contribution to further advances regarding this. Apart from superior corrosion protection, they can be used in two-layer coating systems that are highly effective in reducing VOC emissions. Typical examples are found in marine and transportation applications.

"China is not only the world's most important market for coatings in terms of size and growth, but also the region with a notable dynamic momentum for change in this industry," says Milan Krumbé, Global Market Director Coatings for Solvay Specialty Polymers. "Solvay has been at the forefront of innovative coating polymer technology for many years and delivers system solutions designed to meet and exceed the most demanding requirements in this industry. While contributing to a rapidly changing environment, our solutions have a clear focus on performance and sustainability, helping customers to stay ahead and to meet new regulatory challenges contributing to a green environment," Krumbé concluded.

Moreover, within the Hylar[®] 5000 technology platform, Solvay's offering also includes a new waterborne polyvinylidene fluoride (PVDF) technology for sustainable low-VOC architectural coatings with excellent surface properties that are maintained for many years. These fluoropolymer coatings exhibit outstanding resistance to UV irradiation, humidity, chemicals, chalking, staining, colour change and loss of gloss. They ensure a long-lasting durable finish for unsurpassed surface protection. This can eliminate the need for repainting, thus reducing maintenance and total cost of ownership.

Another, truly unique technology platform are functionalised Fluorolink[®] perfluoropolyether (PFPE) polymers for Functional- and Smart Coatings. These versatile materials from Solvay have an ideal fit as surface treatment or polymer modifiers for improved performance and/or added-value special properties. They reduce the surface energy of coatings and can deliver exceptional oil and stain repellency as well as self-lubricity. Examples are easy-to-clean and self-healing coatings. Specific grades include Fluorolink[®] P56 for waterborne systems, AD1700 for UV-curable coatings, and E10H as a surface modifier in polyurethanes, polyesters or epoxies. In many cases, a concentration ranging from 0.5 to 5 percent will suffice to enhance the final properties of the coating formulation. Development areas are anti-drag coatings leading to lower fuel consumptions for ships and aircrafts or soft touch surfaces as required for anti-fingerprint coatings.

Solvay's high-performance materials offering for the coatings industry is further complemented by a range of Hyflon[®] perfluoroalkoxy (PFA) resins that provide the highest thermal capability and broadest chemical resistance of all melt-processable fluoropolymers. These materials are widely used for coatings in the electrical and electronics, semiconductors, food processing and chemical processing industries. Applications include aqueous dispersions as well as tank and valve linings. Hyflon[®] PFA is available in two product series: M for intrinsic processing stability, higher transmittance and improved surface smoothness, the latter reducing the tendency for adhesion and growth of bacteria; and P featuring a higher melting point.

With regard to high-heat resistant coatings such as those required for cookware coatings with non-stick properties, Solvay also offers KetaSpire[®] polyetheretherketone (PEEK) and Torlon[®] polyamide-imide (PAI) grades that show excellent long-term resistance to thermal cycling at oven temperatures up to 240°C and above. And Halar[®] ethylene chlorotrifluoroethylene (ECTFE) resins, available as primer, topcoat and clearcoat powder grades, provide best-in-class chemical resistance for coating applications in the chemical processing industry and anti-corrosion liners. Developments are focused on thin coating layers broadening the application scope (e.g., for Transportation Coatings).

During this year's Chinacoat at the Canton Fair Complex in Guangzhou (Guangdong) from December 03 to 05, Solvay Specialty Polymers will be exhibiting in Hall 9.2, Booth G01-04. Polymer and coating specialists from Solvay will be available to discuss important trends and innovative solutions with particular focus on the needs of the coatings industry in the Asia-Pacific region.

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About Solvay Specialty Polymers

Solvay Specialty Polymers manufactures over 1500 products across 35 brands of high-performance polymers – fluoropolymers, fluoroelastomers, fluorinated fluids, semi-aromatic polyamides, sulfone polymers, aromatic ultra-high performance polymers, high-barrier polymers and cross-linked high-performance compounds – for use in Aerospace, Alternative Energy, Automotive, Healthcare, Membranes, Oil & Gas, Packaging, Plumbing, Semiconductors, Wire & Cable, and other industries. Learn more at www.SolvaySpecialtyPolymers.com.

Solvay (www.solvay.com) is an international chemical Group committed to sustainable development with a clear focus on innovation and operational excellence. It is realizing over 90% of its sales in markets where it is among the top 3 global leaders. Solvay offers a broad range of products that contribute to improving quality of life and the performance of its customers in markets such as consumer goods, construction, automotive, energy, water and environment, and electronics. The Group is headquartered in Brussels and its companies, which employ about 29,400 people in 56 countries, generated EUR 9.9 billion in net sales in 2013 (pro forma). Solvay SA is listed as **SOLB** on NYSE Euronext (www.euronext.com) in Brussels and Paris. Bloomberg (www.bloomberg.com) = **SOLB:BB**. Reuters (www.reuters.com) = **SOLB.BR**.

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