

Solvay at Chinaplas 2016: An Array of Advanced Polymer Solutions to Serve China's Roadmap for Sustainable Growth

Shanghai, China, April 24, 2016 – Solvay, an international chemical group and leader in high-performance polymers for demanding applications, today announced its Specialty Polymers and Engineering Plastics business units will highlight a full array of advanced product solutions during Chinaplas 2016 (April 25-28) in Shanghai (Booth N1A01) targeted to meet China's ambitious drive for economically, environmentally and socially responsible progress.

"With a stronger than ever focus on local needs in China, we are determined to capture the opportunities arising for our Chinese customers from the recently adopted 'Made in China 2025' roadmap, designed to establish the country as the world's foremost industrial super power through innovation, quality and efficiency," says Dr. Luke Du, managing director Asia, and executive vice president of Solvay Specialty Polymers. *"The plastics industry in China is making enormous efforts to catch up and take the lead in various important fields."*

Marilyn Lye, Asia region director of Solvay Engineering Plastics, also points to the country's 13th Five Years Plan and adds: *"As China has set its course of continuous sustainable growth and development through 2020, we continue to support our customers helping them gain a competitive edge in this dynamic market through industry-leading material solutions and advanced services, such as the new application testing laboratory investment we announce this week at Chinaplas."*

Under the maxim of "More Future", Solvay's exhibit at Chinaplas 2016 addresses four major themes - **Mobility, Connectivity, Life and Energy** - with a broad portfolio of innovative materials. Highlights:

Mobility - Light-weighting and increased energy efficiency remain the single most important challenges when it comes to cutting fuel consumption and emissions in automotive and other transportation segments. This year at Chinaplas, Solvay showcases the Polimotor 2 project and the latest 3D printing achievements from the Sinterline® Technyl powders. The ambitious Polimotor 2 project, set to prove the feasibility of an all-plastics automotive engine in competitive racing, leverages the light-weighting potential of Solvay's advanced polymer technology for up to ten different engine components molded in Amodel® PPA, AvaSpire® PAEK, KetaSpire® PEEK, Radel® PPSU, Ryton® PPS, Sinterline® Technyl® PA6, Tecnoflon® fluoroelastomers and Torlon® PAI. The engine's plenum is 3D printed in a 40 percent glass bead filled Sinterline® powder and underscores the potential of this technology for taking plastics in additive manufacturing from merely visual to fully functional prototypes to low-volume serial parts.

Next-generation mobility is addressed through material solutions for electrification of the powertrain as well as alternative drive and fuel technologies, such as Li-ion batteries with Solef® PVDF binders for electric vehicles or automotive fuel cells with Aquivion® PFSA membranes. To complement this broad offer, Solvay announces at Chinaplas 2016 the development of a new Technyl® range to address latest challenges of automotive electronics in terms of heat performance and electrolytic corrosion resistance.

On its journey around the world powered only by solar energy, the Solar Impulse 2 aircraft carries more than 6,000 parts using high-performance plastic, film, fiber, lubricant and coating products from Solvay, including solar panels protected by ultra-thin Halar® ECTFE film and landing gear cylinders in metal-replacing Ixef® PARA. Only recently, lightweight TegraCore™ PPSU foam from Solvay has been approved by Airbus for applications from ducting to sandwich structures providing superior impact strength while also complying with the most demanding flammability, smoke density and toxic gas emission (FST) requirements.

Connectivity - As China is gaining a significant foothold in high-quality segments of the consumer electronics market, such as with smart phones, Solvay offers its customers a range of superior material solutions to some of the most demanding challenges in the electrical and electronics industry. Where ongoing miniaturization requires thinner wall sections without compromising safety, strength and aesthetics, Solvay unveils an advanced halogen-free flame retardant Technyl® polymer technology to serve the consumer electronics market in Asia. This new solution meets UL 5VA requirements at wall thicknesses as low as 0.8 mm while enabling easy and cost-efficient process.

Durable, thin and aesthetic smart devices molded in Kalix® HPPA also help customers to improve their environmental footprint. Wafer processing equipment and other high-performance semicon applications benefit from the excellent chemical resistance and wide working temperature ranges of Solvay's Fomblin® PFPE fluoropolymer lubricants and functional fluids. Solvay has also added three new grades to its Cogegum® portfolio of cross-linkable and halogen-free flame retardant compounds portfolio for safer and more sustainable wire insulation and cable sheathing applications.

Life - Better quality of life and healthcare require products that must adhere to stringent safety standards and meet tight regulatory specifications. Typical examples where these needs are met on the highest levels span from class-leading fire protection and electrical performance with Technyl® One polyamide technology for smart electrical equipment to medical implants in biocompatible Zeniva® PEEK. Radel® PPSU has a proven fit in devices that are repeatedly sterilized, while Ixef® PARA replaces metal in single-use instruments.

For safe and durable plumbing applications, Solvay's Technyl® range has recently achieved extensive potable water contact approvals to help meet individual local regulations and speed the time to market of new applications, such as pumps, valves, manifolds and filters. As one of the industry's most chemically resistant plastics with excellent mechanical and fatigue strength at continuous-use temperatures up to 240°C, KetaSpire® PEEK has demonstrated its innovative potential in novel flow cell chip holders for high-throughput DNA sequencing equipment, a world's first application using PEEK in genomics research and molded in China.

Energy - In view of increased urbanization and electrification, there is a growing demand for smart energy management and higher capacity solutions. While bio-sourced Technyl® eXten can make an extremely sustainable and effective contribution to the insulation of batteries, new Solef® PVDF binders, separator coating materials and electrolyte additives provide outstanding electrochemical stability, cohesion properties and lamination performance to extend the life and power capacity of Li-ion battery packs.

Solvay's Halar® ECTFE film grades and UV blocking technology have proven their perfect fit in lightweight front and back sheets designed to protect photovoltaic panels from harsh environmental influences. Torlon® PAI, offering the highest strength and stiffness of any thermoplastic material up to 275°C, as well as KetaSpire® PEEK and Solef®, Hyflon® and Tecnoflon® fluoropolymers are widely used for bearings, seals, risers in severe end-use environments of the oil and gas industry.

In supporting the company's broad materials portfolio, Solvay is continuously investing in its production, research and innovation capacities and operates about half of its global R&I laboratories in Asia. A new Application Performance Testing facility in Shanghai will offer local services for Technyl® customers, from material evaluation to molding trials and part testing. Recent expansions include added capacities for Tecnoflon® FKM and Solef® PVDF at Changshu as well as for Technyl® polyamides at Shanghai. A strategic alliance with Shanghai 3F New Material Co., Ltd. serves Asia's growing demand for high-performance fluorinated polymers.

During Chinaplas 2016 at Shanghai's New International Expo Centre, Solvay's material and market specialists will be available to discuss the benefits of the company's advanced solutions for profitable and sustainable products made in China and beyond.

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About Solvay Engineering Plastics

Solvay Engineering Plastics is the global specialist in polyamide-based engineering plastics, with more than 60 years of experience in the development, manufacture and marketing of a complete range of high-performance materials under the Technyl® brand for demanding applications in automotive, electrical and electronics, construction, consumer goods and other markets. With a growth strategy bolstered by six production sites worldwide, Solvay Engineering Plastics employs its expertise and innovation capabilities in order to serve the needs of its customers more closely through a global network of technical and R&D centers. Learn more on Technyl® brand at www.technyl.com.

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 and Gas, Packaging, Plumbing, Semiconductors, Wire & Cable, and other industries. Learn more at www.solvayspecialtypolymers.com.

About Solvay

An international chemical and advanced materials company, **SOLVAY** assists its customers in innovating, developing and delivering high-value, sustainable products and solutions which consume less energy and reduce CO2 emissions, optimize the use of resources and improve the quality of life. Solvay serves diversified global end markets, including automotive and aerospace, consumer goods and healthcare, energy and environment, electricity and electronics, building and construction as well as industrial applications. Solvay is headquartered in Brussels with about 30,000 employees spread across 53 countries. It generated pro forma net sales of €12.4 billion in 2015, with 90% made from activities where it ranks among the world's top 3 players. Solvay SA (**SOLB**) is listed on Euronext in Brussels and Paris (Bloomberg: **SOLB:BB** – Reuters: **SOLB.BR**).

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