

## Solvay's Extensive Portfolio of Advanced Polymers Meets Growing Demand from Instrumentation to Implants

SAN FRANCISCO, Calif., November 12, 2014 – Solvay Specialty Polymers – a leading global supplier of high-performance thermoplastics offered for use in a range of markets including implantable and non-implantable medical devices – will showcase its broad portfolio of advanced materials for the healthcare sector at the North American Spine Society's (NASS) annual meeting Nov. 12-15 in San Francisco.

For permanent and prolonged exposure implants and limited exposure devices, Solvay's high-performance plastics deliver strong, lightweight performance along with exceptional design flexibility, ease of fabrication, regulatory compliance, and the ability to differentiate products and brands using colors. Solvay's global healthcare business team focuses on the medical implant market (Solviva® Biomaterials), the hemodialysis market, and new future growth segments within the global healthcare industry. Solvay's non-implant business includes medical grade plastics for instrumentation, reusable and single-use devices, medical equipment, and sterilization cases and trays.

"With our broad product portfolio we are firmly positioned as a strategic supplier to the global healthcare industry," said Maria Gallahue-Worl, Business Development Manager-Healthcare for Solvay Specialty Polymers "We are leveraging our position as a leading supplier of high-performance polymers to support applications from instrumentation to implants."

Last year, the company announced the commercial availability of its Solviva® Biomaterials for implantables in China. "China is a key player in high-growth markets including healthcare, and we are committed to the development of innovative materials solutions to help support and drive the medical device market," Gallahue-Worl added. The company is leveraging its extensive expertise in polymer manufacturing and adding substantial new resources to give customers a competitive edge in meeting their end-use requirements, she said. Solvay serves the Chinese market from its Shanghai facility where it operates research and development, sales, and commercial activities.

The line of Solviva® Biomaterials for use in implantable medical devices includes Zeniva® PEEK, which boasts a modulus very close to that of bone plus excellent biocompatibility, toughness, and fatigue resistance; Eviva® polysulfone (PSU), which offers practical toughness in a strong, transparent polymer; Veriva® polyphenylsulfone (PPSU), which provides unsurpassed toughness combined with transparency and excellent biocompatibility; and Proniva® self-reinforced polyphenylene (SRP), one of the world's stiffest and strongest unreinforced thermoplastic that offers exceptional hardness and biocompatibility.

Solvay offers a broad range of medical grade plastics for instrumentation, reusable and single-use devices, medical equipment, and sterilization cases and trays. The extensive product line includes Radel® polyphenylsulfone (PPSU), a highly tough, transparent plastic that can withstand more than 1,000 cycles of steam sterilization without any significant loss of properties. This makes it an excellent choice for cases, trays and other reusable medical devices. Meanwhile, Udel® polysulfone (PSU), a rigid, high-strength, semi-tough, transparent plastic, offers higher heat resistance and better hydrolytic stability than polycarbonate (PC). PSU retains its good mechanical properties when exposed to oxidizing agents, steam and other sterilization techniques. Opaque and transparent colors as well as glass fiber reinforced grades are available.

Other key material solutions include Ixef® polyarylamide (PARA) which uniquely combines high stiffness with an ultra-smooth finish that's on par with painted metal. Gamma-stabilized colors can be sterilized using gamma radiation without any significant change in appearance or loss of mechanical properties. AvaSpire® polyaryletherketone (PAEK) is a versatile family of proprietary formulations tailored to provide new and unique combinations of performance and value. AV-600 Series products deliver excellent chemical resistance, good impact strength and can withstand more than 1000 cycles of steam sterilization. Lastly, KetaSpire® polyetheretherketone (PEEK) resin is one of the most chemically resistant plastics available and offers excellent strength, stiffness, and fatigue resistance. PEEK can be used continuously in hot water or steam without significant loss in physical properties.

Solvay is building on its more than 20-year history as a key material supplier in the healthcare field, devoting considerable new resources to help customers be more efficient and cut costs. Metal-to-plastic replacement remains a key focus for manufacturers, and material suppliers like Solvay continue to help meet increasing cost demands, according to the company.

Solvay is a full-service supplier, providing design, technical service, and application development support for the global healthcare market. Solvay also continues to devote considerable research and development activities to polymer technology and commercialization of new and unique material options for medical OEMs and processors.

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## **About Solvay Specialty Polymers**

Solvay Specialty Polymers is a leading global supplier of high-performance thermoplastics for permanent and prolonged exposure implants and limited exposure devices. The company has expanded its focus on the healthcare industry to meet the growing needs of its global customers by providing global technical and regulatory support. Solvay is building on its 25-year history as a key material supplier in the healthcare field, devoting considerable new resources to help customers be more efficient and cut costs. Metal-to-plastic replacement remains a key focus for manufacturers, but increased cost pressures pose a new challenge as the market continues to grow at a double-digit pace. Solvay also continues to devote considerable research and development activities to polymer technology and commercialization of new and unique material options for medical OEMs and processors.

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 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 and cable, and other industries. Learn more at <u>www.SolvaySpecialtyPolymers.com</u>

As an international chemical group, SOLVAY assists industries in finding and implementing ever more responsible and valuecreating solutions. Solvay generates 90% of its net sales in activities where it is among the world's top three players. It serves many markets, varying from energy and the environment to automotive and aeronautics or electricity and electronics, with one goal: to raise the performance of its clients and improve society's quality of life. The group is headquartered in Brussels, employs about 29,400 people in 56 countries and generated 9.9 billion euros in net sales in 2013. Solvay SA (SOLB.BE) is listed on NYSE EURONEXT in Brussels and Paris (Bloomberg: SOLB:BB - Reuters: SOLB.BR).

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