

China's Medshine Uses Solvay's Radel® PPSU and AvaSpire® PAEK in Locally-Produced Medical Sterilization Case

*High-Performance Thermoplastics Provides Strength, Transparency,
Chemical Resistance, and Exceptional Sterilizability*

BOLLATE, Italy, October 9 2014 – Medshine Medical Devices Co., Ltd., a leading Chinese medical device manufacturer based in Qingdao, has introduced one of the first locally-produced surgical sterilization cases made of high-performance thermoplastics from Solvay Specialty Polymers. The sterilization case – made of Radel® polyphenylsulfone (PPSU) and AvaSpire® polyaryletherketone (PAEK) resins – can withstand repeated steam sterilization cycles and autoclave temperatures up to 273°F (134°C) without significant loss of properties.

Medshine's five-year product development effort resulted in the selection of Radel® PPSU over metal and other thermoplastics because of its excellent steam sterilizability, toughness and strength, and multiple color options. For the injection molded rigid container, Radel® provided other key performance benefits including transparency and chemical resistance, according to Zhou Pishun, Medshine's Chief Executive Officer. Pishun noted that medical products, such as high-end cases and trays, are imported from the U.S. and Europe, and this new high-end product is one of the first to be produced by a local supplier using Solvay materials.

"For our application, the material has a long history in the market and gives us a high degree of confidence," explained Pishun. "Radel® PPSU has played a major role by delivering resiliency and exceptional sterilization to meet our demanding requirements."

Lightweight Radel® PPSU is a highly tough, transparent plastic that offers excellent chemical resistance and can withstand repeated disinfection and autoclaving – over 1,000 cycles – while maintaining its toughness and impact resistance, according to Solvay.

The case's latch component is injection molded of AvaSpire® PAEK, 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 1,000 cycles of steam sterilization.

There are four types of sterilization cases available in a wide range of sizes, ranging up to 600-mm (23.6-in) by 300-mm (11.8-in) by 260-mm (10.2-in). Medshine commercialized the Radel® sterilization case via a distributor agreement in July and plans global availability in the near future. The device maker is also considering the use of Solvay's Udel® polysulfone (PSU) resin for a laparoscopic case and tray.

Solvay Specialty Polymers is a global leader in the development of sulfone polymer technology, launching Udel® polysulfone nearly 45 years ago. In addition, Solvay's experience as a key materials supplier in the healthcare field spans more than 20 years. 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. Solvay serves the Chinese market from its Shanghai facility where it operates research and development, sales, and commercial activities.

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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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Caption: Medshine introduced one of the first locally-produced surgical sterilization cases made of high-performance thermoplastics from Solvay Specialty Polymers

(Picture Courtesy of MedShine)