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International Polymer Engineering Manufactures Small-Diameter Microtubes of Solvay's KetaSpire® PEEK

*Custom Extruder Expands Capabilities by Offering
PEEK Microtubes and Profiles to Medical Industry*

ALPHARETTA, Ga., February 22, 2011 – International Polymer Engineering (IPE), Tempe, Ariz., a leading custom extruder of thermoplastic tubing and profiles, has expanded its product line, offering the new capability of producing small-diameter microtubes and profiles made of KetaSpire® polyetheretherketone (PEEK) resin from Solvay Advanced Polymers, LLC, for the medical industry.

Until now, IPE has specialized in custom extruded profiles, tube, sheet, and rod made of nylon, PTFE, polyurethane, polycarbonate, and other thermoplastics for the medical, lighting, and industrial markets. The new focus on PEEK tube and profile is in response to growing market demand, according to Jonathan Jurgaitis, IPE's melt thermoplastic specialist. "From the many calls we received, it was clear that there was a demand for PEEK tubes," said Jurgaitis. "So we worked closely with Solvay by tapping into their technical expertise to develop custom products that meet the stringent requirements of the medical industry."

Microtubes made of KetaSpire PEEK offer greater strength and rigidity than PTFE microtubes and are easier to work with than those made of stainless steel. They are used in a

range of medical applications including catheters, endoscopic working channels, and laparoscopic instruments. IPE has produced microtubes made of unfilled KetaSpire KT-820 NT PEEK as small as 0.029-inch OD by 0.016-inch ID (0.74-mm OD by 0.41-mm ID) and 0.077-inch OD by 0.057-inch ID (1.96-mm OD by 1.45-mm ID). The company can make PEEK tubes with up to a 0.25-in (6.35-mm) diameter.

IPE is able to achieve the small diameter size through optimized processing; that is, achieving a balance between line speed, processing temperature, and appropriate tooling and drawdown ratio, according to Jurgaitis. “KetaSpire PEEK is a consistent material with good melt stiffness which lends itself to free extrusion,” explained Jurgaitis. “We had a good experience - unlike some high-end materials which can be difficult to extrude.”

IPE manufactures the microtubes on a 1-inch extruder specially designed for high-temperature materials like PEEK, which process at very high melt temperatures in the range of 370°C (700°F). IPE also has the capacity to manufacture PEEK profiles, both open and hollow, for a wide range of applications.

KetaSpire PEEK is one of the industry's most chemically resistant plastics and also offers excellent strength, superior fatigue resistance, and a continuous-use temperature of 240°C (464°F). It can withstand more than 1,000 cycles of steam sterilization without any significant loss of properties and is also compatible with other sterilization methods, including ethylene oxide, vaporized hydrogen peroxide, and gamma radiation. Based on biocompatibility testing as defined by ISO 10993-1, KetaSpire PEEK demonstrates no evidence of cytotoxicity, sensitization, intracutaneous reactivity or systemic toxicity.

About International Polymer Engineering

International Polymer Engineering (IPE), Tempe, Ariz., provides high-quality design, engineering, and manufacturing services for the production of custom profile extrusions made from porous polytetrafluoroethylene (PTFE) and a variety of melt thermoplastic materials. The company uses the latest in polymer technology and automated extrusion

techniques to reduce cost and shorten lead times for the manufacture of small-diameter tubing. IPE uses PTFE, FEP, nylon, polyurethane, and other thermoplastics to extrude materials to customer established specifications for medical, lighting, and industrial applications. For more information, visit www.ipeweb.com.

About Solvay Advanced Polymers

Solvay Advanced Polymers, LLC, produces more plastics with more performance than any other company in the world. This gives design engineers worldwide more ways to solve top design challenges in automotive, medical, electronics, aerospace and other demanding industries. Learn more at www.solvayadvancedpolymers.com.

Solvay is an international industrial Group active in Chemistry. It offers a broad range of products and solutions that contribute to improving quality of life. The Group is headquartered in Brussels and employs 17,000 people in over 40 countries. In 2010, its consolidated sales amounted to EUR 7.1 billion. Solvay is listed on the NYSE Euronext stock exchange in Brussels (NYSE Euronext: [SOLB.BE](http://www.nyse.com/quote/NYSE:SOLB.BE) - Bloomberg: [SOLB.BB](http://www.bloomberg.com/quote/SOLB:BB) - Reuters: [SOLBt.BR](http://www.reuters.com/quote/SOLBt:BR)). Details are available at www.solvay.com.

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