

Solvay's Ixef® PARA enables Intelligent Implant Systems to pioneer a new single-use instrument kit for anterior cervical fusion procedures

Alpharetta, Ga., September 26, 2018 --- Solvay, a leading global supplier of specialty polymers, announced today that the high stiffness, strength, gamma sterilization resistance and biocompatibility of its Ixef® polyarylamide (PARA) resin helped enable a new single-use instrument kit for anterior cervical fusion procedures. Developed by Intelligent Implant Systems, a medical device company specializing in solutions for spinal surgery, the MEDIANT™ Anterior Cervical Plating System leverages Solvay's advanced polymer to help boost operating room (OR) efficiency, eliminate onsite sterile processing and reduce infection risk.

"The primary benefit of Solvay's Ixef® PARA in this application is its metal-like strength, which gives our single-use surgical instruments a very high level of performance without incurring the costs associated with machining metal and repeated steam sterilization," said Marc Richelsoph, president and CEO of Intelligent Implant Systems. *"Although PEI also offered viable options for our surgical tool kit, we specified Ixef® GS-1022 PARA because its superior stiffness and moldability was essential for the kit's instruments."*

Ixef® GS-1022 PARA forms the awl and pin-screwdriver handles, measuring caliper, and locking plier handles in Intelligent Implant Systems' kit. The polymer's excellent impact resistance also eliminated the need for a metal strike plate that had been part of the awl's early designs. This reduced the cost and simplified the manufacture and assembly of the instrument, further supporting the economics of single-use instruments.

Ixef® GS-1022 PARA provides excellent aesthetics, including an attractive surface finish. The material is available in a range of gamma-stabilized colors, including the signature green of the MEDIANT™ System's tools. Together, these properties of Ixef® PARA ensure Intelligent Implant Systems' single-use instruments retain their visual appeal after they are gamma sterilized and packaged for delivery. Solvay's PARA polymer has been evaluated for ISO 10993 limited duration biocompatibility and is supported by an FDA Master Access File, which helped streamline the MEDIANT™ kit's navigation through regulatory approvals.

"Solvay was an early advocate of the healthcare industry's shift toward single-use surgical instruments, and we sought to support customers by proactively developing a broad portfolio of biocompatible polymer alternatives to metal – complete with gamma-sterilized colors and master access files," said Jeff Hrivnak, business manager for Healthcare at Solvay's Specialty Polymers Global Business Unit. *"Yet while the industry's growing adoption of our advanced polymers validates this early insight, we derive much greater satisfaction in working closely with innovators like Intelligent Implant Systems to help achieve unique new designs for improving patient results."*

Intelligent Implant Systems will feature the MEDIANT™ Anterior Cervical Plating System at Booth #1905 during The North American Spine Society (NASS) meeting in Los Angeles, Sept. 26-29. For related news about specialty polymers for healthcare, please go to www.solvayhealthcarenews.com.

® Ixef is a registered trademark of Solvay

™ MEDIANT is a trademark of Intelligent Implant Systems

Intelligent Implant Systems is based in Charlotte, NC. Founded in 2007, the company aims to develop and market innovative surgical solutions for orthopedics and both fusion and non-fusion applications of the spine. Since its inception, the company has been granted multiple U.S. patents with foreign and additional U.S. patents pending to protect its core technology. Innovation is truly part of what Intelligent Implant Systems brings to patients, surgeons, hospitals and ambulatory surgery centers. Learn more at www.intelligentimplantsystems.com.

Solvay is an advanced materials and specialty chemicals company, committed to developing chemistry that addresses key societal challenges. Solvay innovates and partners with customers worldwide in many diverse end markets. Its products are used in planes, cars, batteries, smart and medical devices, as well as in mineral and oil and gas extraction, enhancing efficiency and sustainability. Its lightweighting materials promote cleaner mobility, its formulations optimize the use of resources and its performance chemicals improve air and water quality. Solvay is headquartered in Brussels with around 26,800 employees in 61 countries. Net sales were €10.1 billion in 2017, with 90% from activities where Solvay ranks among the world's top 3 leaders, resulting in an EBITDA margin of 22%. Solvay SA (**SOLB.BE**) is listed on Euronext Brussels and Paris (Bloomberg: **SOLB.BB** - Reuters: **SOLB.BR**) and in the United States its shares (**SOLVY**) are traded through a level-1 ADR program. *Financial figures take into account the announced divestment of Polyamides.*

Solvay Specialty Polymers manufactures over 1500 products across 35 brands of high-performance polymers – fluoropolymers, fluoroelastomers, fluorinated fluids, semi-aromatic polyamides, sulfone polymers, ultra-high performance aromatic polymers, and high-barrier polymers – 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.

Media Relations

[Marla Witbrod](#)

Solvay Specialty Polymers
+1 770 772 8451

marla.witbrod@solvay.com

[Dan McCarthy](#)

AH&M Marketing Communications
+1 413 448 2260 Ext. 470

dmccarthy@ahmnc.com

[Enrico Zanini](#)

Solvay Specialty Polymers
+39 338 603 4561

enrico.zanini@solvay.com

[Alan Flower](#)

Industrial Media Relations
+32 474 117 091

alan.flower@indmr.com



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Press release



Solvay's Ixef® polyarylamide helped Intelligent Implant Systems develop an innovative, new single-use instrument kit for anterior cervical fusion procedures. Comprising an awl, combination pin-screwdriver, locking pliers, measuring caliper and other components, the surgical tools leverage Solvay's advanced PARA polymer to help boost operating room efficiency, eliminate sterile processing and reduce infection risk. Courtesy of Intelligent Implant Systems.