

Solvay's Radel® PPSU combines light weight and sterilizability for a more ergonomic dental scaler from SMACO Company

Alpharetta, Ga., Feb. 22, 2018 --- Solvay, a leading global supplier of specialty polymers, announced that SMACO Company chose high-performance Radel® R-5100 NT polyphenylsulfone (PPSU) to mold a more ergonomic hand piece for an innovative new dental scaler designed to lower hand fatigue.

SMACO sought a lightweight polymer rather than metal for its hand piece in order to avoid the hand fatigue users commonly experience with heavier designs. However, many other medical-grade polymers they considered could not withstand the sterilization techniques that the dental scaler would undergo.

"Moldable Radel® PPSU not only offered SMACO the low weight they needed to develop a more ergonomic design, the material also delivered high heat resistance and excellent hydrolytic stability," said Huawei Li, development manager for Greater China and South East Asia at Solvay's Specialty Polymers global business unit. *"This made it a superior choice over lower performing polymers for molding a dental instrument able to perform reliably after repeated steam sterilization."*

Radel® PPSU can withstand over 1,000 autoclave cycles without significant loss of properties. This incredibly tough polymer also offers excellent impact strength and better chemical resistance than either polysulfone (PSU) or polyetherimide (PEI). Additionally, the material is certified to ISO 10993 standards for biocompatibility

"Medical-grade Radel® R-5100 NT offered the optimal combination of properties for our design," said Thomas Yulzari, head of operations for SMACO. *"Yet Solvay's contribution to our success only began with the excellent performance of its specialty polymer. They backed their material with dedicated technical support, molding expertise and even failure analysis of the finished product."*

SMACO's new piezoelectric scaler models, with or without an LED light, are available globally.

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SMACO Company

Since its founding in the 1990s, SMACO has made its name in the market as one of the leading manufacturers of curing lights and amalgamators. Since 2012, the world-leading Swiss Prophylaxis company Electro Medical Systems (E.M.S.) invested in SMACO, with the pronounced aim of bringing efficient and affordable prophylaxis therapy to SMACO customers. E.M.S. has applied its knowledge and competence in engineering and designing a portfolio that clearly differentiates itself from the low-cost competition in this field.

Solvay

Solvay is a multi-specialty chemical company, committed to developing chemistry that addresses key societal challenges. Solvay innovates and partners with customers in diverse global end markets. Its products and solutions are used in planes, cars, smart and medical devices, batteries, in mineral and oil extraction, among many other applications promoting sustainability. Its light weighting materials enhance 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 27,000 employees in 58 countries. Net sales were € 10.9 billion in 2016, with 90% from activities where Solvay ranks among the world's top 3 leaders. 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.

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, 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.

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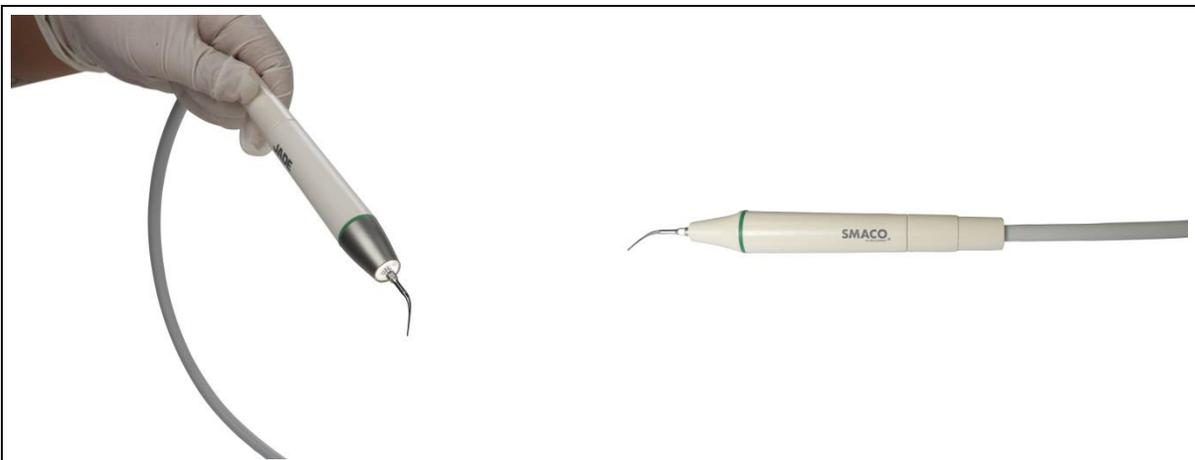
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Solvay, a leading global supplier of specialty polymers, announced that SMACO Company chose high-performance Radel® R5100 NT polyphenylsulfone (PPSU) to mold a more ergonomic hand piece for an innovative new dental scaler designed to lower hand fatigue. Photo courtesy of SMACO Company.