

## **Celanese Riteflex<sup>®</sup> 640A TPC-ET is Plastics One 'Go-To' Material for Medical Cable and Connector Systems**

### ***Performs with High Voltage and Excels in Overmolding***

Florence, Ky., Sulzbach, Germany, Shanghai, PR China, Jan. 28, 2014 – [Riteflex<sup>®</sup> 640A](#) thermoplastic polyester elastomer (TPC-ET) from [Celanese Corporation](#) (NYSE: CE), a global technology and specialty materials company, is the material of choice for medical cable and connector systems produced by [Plastics One Inc.](#)

“Whatever we design and build, Riteflex 640A is our ‘go-to’ material because it performs well with high voltage and excels in overmolding to a substrate,” said Steve Heckman, senior research and development engineer at Plastics One of Roanoke, Va., which specializes in the design, assembly and molding of connectors and cables for customers in the global medical market. “We switched from commonly available copolyester and we’ve continued to grow and use Riteflex 640A.”

Plastics One uses Riteflex 640A TPC-ET because it provides the right durability and balance of properties required for medical cable and connector systems designed for patient diagnostics and monitoring applications, nerve integrity monitoring, hearing enhancement, and sleep and respiratory studies.

Celanese will feature Plastics One medical cable and connector systems with [Riteflex](#) TPC-ET at [MD&M West](#) from Feb. 11 to 13 at Anaheim, Calif., in [Booth 1945](#), which will include the dedicated Celanese portfolio of advanced medical materials — [Hostaform<sup>®</sup>](#) acetal copolymer (POM), [Celanex<sup>®</sup>](#) thermoplastic polyester (PBT), [Fortron<sup>®</sup>](#) polyphenylene sulfide (PPS), [Vectra<sup>®</sup>](#) liquid crystal polymer (LCP) and [GUR<sup>®</sup>](#) ultra-high molecular weight polyethylene (UHMW-PE) engineered materials; [Ateva<sup>®</sup>](#) Medical EVA polymers and [VitalDose<sup>®</sup>](#) EVA; and [Clairfoil<sup>®</sup>](#) Acetate film.

“As a global solution provider with more than 50 years of material, component design and processing expertise, Celanese is helping Plastics One meet its material challenges,” said Anthony Verrocchi, medical marketing manager - Celanese. “Riteflex 640A TPC-ET, which provides the required electrical insulation and material flexibility required by medical connectors and cables, is one reason why Plastics One is internationally recognized as a specialist in innovative custom design, tooling and medical molding.”

Plastics One molds a variety of plugs, connectors and bend reliefs in various colors with Riteflex 640A TPC-ET, including:

- **Cable Assemblies** — Plastics One overmolds PVC wire jackets with Riteflex because the two materials bond well. The medical connectors, which must withstand 1,000 insertion cycles, incorporate sealed contacts to ensure efficient function, long-life and maximum signal transfer at the connection point.
- **Medical Electrodes and Contacts** — One-piece electrodes and contacts, which provide a patient interface such as snore sensors used in sleep studies, are molded by Plastics One using a two-shot process that pre-molds with Riteflex TPC-ET and overmolds to achieve cross linking.
- **Jumper Cables** — Plastics One uses Riteflex TPC-ET to mold fine detail on bend reliefs to enhance cable life.
- **Touchproof Safety Plugs and Jacks** — Plastics One uses overmolded Riteflex TPC-ET parts with integral bend reliefs or medical touch proof systems that meet the IEC-60601-1 standard.

“Several of our medical market applications use overmolded Riteflex parts because it plays well with PVC; the melt temperatures need to be similar so the PVC wire jacket doesn’t melt,” Heckman said. “These over molded parts include integral bend reliefs or medical touchproof systems that meet the IEC-60601-1 standard, which covers the overall electrical safety requirements for medical equipment connected to electrical mains.”

Medical touchproof or "safety" connectors have evolved into a specialized class of connectors that fall under several international standards. IEC/EN 60601-1 is an International standard that covers the overall electrical safety requirements for medical equipment connected to electrical mains. It specifies overall test requirements that connection systems must meet.

[Riteflex TPC-ET](#)s combine toughness and resilience with excellent resistance to creep, impact, tear and flex fatigue. Specifically, Riteflex 640A TPC-ET:

- Performs well over a wide range of temperatures, from -40 degrees Celsius to 120 degrees Celsius (-40 degrees Fahrenheit to 250 degrees Fahrenheit)
- Delivers good impact resistance at low temperatures, while retaining useful properties at high temperatures
- Exhibits excellent chemical resistance to common solvents, fuels, oils and greases, dilute acids and bases
- Offers high Comparative Tracking Index (CTI) — up to 600 volts

#### **About Celanese**

*Celanese Corporation is a global technology leader in the production of differentiated chemistry solutions and specialty materials used in most major industries and consumer applications. With sales almost equally divided between North America, Europe and Asia, the company uses the full breadth of its global chemistry, technology and business expertise to create value for customers and the corporation. Celanese partners with customers to solve their most critical needs while making a positive impact on its communities and the world. Based in Dallas, Texas, Celanese employs approximately 7,400 employees worldwide and had 2013 net sales of \$6.5 billion. For more information about Celanese Corporation and its product offerings, visit [www.celanese.com](http://www.celanese.com) or our blog at [www.celaneseblog.com](http://www.celaneseblog.com).*

#### **About Plastics One Inc.**

*Plastics One has been partnering directly with OEMs worldwide since 1949 by working together to provide solutions to industry needs.*

*As an ISO 13485 and 9001 certified full-service medical component manufacturer the focus is on designing and building custom cable and connector assemblies with unique design requirements. The engineers and R&D teams are hands on, and ready to help bring your ideas to life. If you already have a design, the engineers are available to discuss specific design and usage*

*requirements, as well as offer design assistance, material selection and prototype services. The R&D team works directly with customers to develop prototype parts and tooling to prove out concepts prior to committing to production tooling.*

*The company also manufactures and assembles innovative devices for patient diagnostics and monitoring, nerve integrity monitoring, hearing enhancement, audio and communications, as well as sleep and respiratory studies. Their specialty is the design and build of custom cable assemblies with unique and complicated design requirements. The standard product line provides more than 1000 styles of molded electrodes and contacts, DIN and circular connectors, audio connectors, RF connectors, exposed pin plugs, touchproof safety plugs, yokes and adapters.*

*The facility encompasses over 85,000 square feet and offers in-house design engineering, research and development, a state of the art tool room, diverse plastic injection molding, assembly and packaging services. The quality management system subjects products to rigorous inspection before they are shipped to the customer.*

*Plastics One also has nine ISO Class 8, 100,000 Cleanrooms with two ISO Class 7, 10,000 Cleanrooms which are utilized for molding, assembly and packaging parts for the medical device industry.*

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**Forward-Looking Statements**

*This release may contain "forward-looking statements," which include information concerning the company's plans, objectives, goals, strategies, future revenues or performance, capital expenditures, financing needs and other information that is not historical information. When used in this release, the words "outlook," "forecast," "estimates," "expects," "anticipates," "projects," "plans," "intends," "believes," and variations of such words or similar expressions are intended to identify forward-looking statements. All forward-looking statements are based upon current expectations and beliefs and various assumptions. There can be no assurance that the company will realize these expectations or that these beliefs will prove correct. There are a number of risks and uncertainties that could cause actual results to differ materially from the forward-looking statements contained in this release. Numerous factors, many of which are beyond the company's control, could cause actual results to differ materially from those expressed as forward-looking statements. These factors include the inability to obtain regulatory approvals of the transaction and satisfy conditions on the proposed terms and*

*schedule and the possibility that the transaction does not close. Other risk factors include those that are discussed in the company's filings with the Securities and Exchange Commission. Any forward-looking statement speaks only as of the date on which it is made, and the company undertakes no obligation to update any forward-looking statements to reflect events or circumstances after the date on which it is made or to reflect the occurrence of anticipated or unanticipated events or circumstances.*

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