

Solvay's Ixef® PARA delivers higher thermal and dimensional stability, smoother surface to quieter clutch actuator design from FTE automotive Group

Novi, Mich., May 18, 2017 --- Solvay, a leading global supplier of specialty polymers, announced this week at the International CTI Symposium (Booth 52A) that its Ixef® 1027 polyarylamide (PARA) enabled development of a new clutch actuator system from FTE automotive Group, a premier producer of drivetrain and brake system applications. Selected to replace a glass-filled polyamide (PA) 6/6 actuator that generated cabin noise at elevated temperatures, Ixef® 1027 PARA introduced lower thermal expansion and higher dimensional stability to the new actuator design, which is now onboard a leading heavy-duty diesel truck series sold in the U.S.

FTE and its customer have managed to reduce cabin noise with each new generation of the manual transmission truck. Ironically, this has caused once relatively quiet functions to become ever more noticeable in recent models. The clutch pedal – or rather the hydraulic actuator system it activates – became the latest target for improvement. The actuator comprises a master cylinder consisting of a piston that attaches to the pedal and a slave cylinder that links to the truck's drivetrain. Depressing the clutch pedal transfers brake fluid from the master into the slave, which then disengages the transmission from the engine.

Solvay and FTE, who have collaborated for over 20 years, worked together to select Ixef® 1027 PARA, a 50 percent glass-fiber reinforced, heat-stabilized compound that delivers very high strength and rigidity along with excellent creep resistance. The material flows and packs very well in the tool, which provides the inside bores of the molded clutch cylinders with a very smooth, resin rich surface. The aromatic ring structure of the PARA molecule – in contrast to conventional nylon's straight chain – substantially reduces its moisture absorption and enables the clutch cylinders to be more dimensionally stable.

Held in Novi, Michigan from May 15 to 18, the 11th Annual International CTI Symposium and its adjoining exhibition is the international industry event for professionals seeking the latest developments in automotive transmissions, HEV, and EVs for passenger cars and commercial vehicles.

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About FTE automotive Group

The FTE automotive Group is your competent partner in the sector of development and production of drive train and brake system applications for the automotive industry. The company is located in all important continents and one of the leading OE-suppliers for passenger cars and commercial vehicles worldwide. Learn more at www.fte-automotive.com.

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 and Gas, Packaging, Plumbing, Semiconductors, Wire & Cable, and other industries. Learn more at www.solvayspecialtypolymers.com.

About 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](http://www.euronext.com/brussels/SOLB.BE)) is listed on Euronext Brussels and Paris (Bloomberg: [SOLB.BB](http://www.bloomberg.com/quote/SOLB:BB) - Reuters: [SOLB.BR](http://www.reuters.com/quote/SOLB:BR)) and in the United States its shares (SOLVY) are traded through a level-1 ADR program.

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