

## Solvay is promoting technologies for high rate manufacture of automotive and aerospace structures at Composites Europe 2016

**Tempe - November 29th, 2016** --- Solvay is exhibiting at Composites Europe in Düsseldorf, Germany (Nov 29<sup>th</sup> – Dec 1<sup>st</sup>) on stand G25, Hall 8B and is promoting innovations for the volume and cost efficient manufacture of automotive, aerospace and industrial structures.

Our rapid cure thermoset preregs for automotive applications include **MTR® 760** and **MTM® 710-1**:

- The new **MTR® 760** resin system was specifically developed to manufacture resin impregnated carbon fiber blanks. It offers very good processing properties with rapid cure of 5 minutes at 140°C, a DMA onset TG of 135°C, superior toughness and has excellent dynamic loading characteristics that enable the cured part to pass crash and head impact tests without splintering. The outstanding surface finish of the cured part allows a Class-A paint finish, without the need for any additional surface film. Solvay is exhibiting on its stand the BMW M4 GTS hood manufactured with MTR® 760 which offered a 40% weight reduction when compared to aluminum. This hood recently won the SPE Process Innovation Award as “Most Innovative Composite Part.”
- **MTM® 710-1** is an epoxy resin prepreg matrix developed specifically for high rate high volume manufacture of structural components using hot compression molding processes. Depending upon the cure temperature selected, MTM® 710-1 can be used to manufacture components with a total cycle time of 3 minutes. On display on the stand is an automotive bulkhead press cured by Penso with MTM® 710-1 heavy-tow UD NCF. This material gave the manufacturer the perfect balance of structural integrity and lower total system cost.

Our breakthrough liquid resin infusion technology for aerospace primary structure applications includes Solvay’s dry tape **TX® 1100** and Solvay’s resin system **EP® 2400**. This technology was used to manufacture the wing and wing box of the Russian MC-21 aircraft. The MC-21 is the only single-aisle passenger plane whose composite wing structures were manufactured using out-of-autoclave infusion technology and automated fiber deposition. This represents arguably the most technologically advanced wing design in the commercial aerospace sector. Solvay’s infusion materials technology allowed the design and manufacture of a large, complex and integrated part structure faster and more efficiently, gaining capacity flexibility and reducing capital intensity. On Solvay’s stand is a one piece infused demonstrator integrating stringers and skin.

Solvay’s broad selection of **kitted materials for vacuum bagging processes** enable aerospace and wind OEMs and Tier 1 suppliers to improve process control and therefore part quality and repeatability while also streamlining labor costs, production times and waste. Solvay’s stand features several Process Materials for prepreg and infusion processing.

**Solvay Composite Materials** - Solvay's new Global Business Unit, Composite Materials, is a global provider of technologically advanced lightweighting material solutions that enable our customers in the aerospace, automotive and other demanding industries to design, develop and efficiently manufacture high-quality, high-performance and complex composite structures. Composite Materials has the most extensive product portfolio, including prepregs, resin systems, adhesives and surfacing films, carbon fiber, textiles, tooling and vacuum bagging consumables, thanks to its leadership in advanced materials science, chemistry and application engineering. Solvay Composite Materials combines the former Cytec Aerospace Materials and Industrial Materials businesses

An international chemical and advanced materials company, Solvay assists its customers in innovating, developing and delivering high-value, sustainable products and solutions which consume less energy and reduce CO2 emissions, optimize the use of resources and improve the quality of life. Solvay serves diversified global end markets, including automotive and aerospace, consumer goods and healthcare, energy and environment, electricity and electronics, building and construction as well as industrial applications. Solvay is headquartered in Brussels with about 30,900 employees spread across 53 countries. It generated pro forma net sales of € 12.4 bn in 2015, with 90% made from activities where it ranks among the world's top 3 players. Solvay SA (**SOLB.BE**) is listed on Euronext in Brussels and Paris (Bloomberg: **SOLB.BB** - Reuters: **SOLB.BR**).

**Claire Michel**

Communications

Claire.michel@solvay.com