



Progress beyond

Solvay launches new SolvaLite[®] grade for superior flame retardancy in battery enclosures

The new grade meets the automotive sector's demand for material solutions to protect electric batteries from fire hazards

Atlanta, Georgia, USA, October 24th, 2023

Solvay, a leading global supplier of specialty materials, has announced the launch of [SolvaLite[®] 716 FR](#), an innovative fast-curing epoxy prepreg system designed for a wide range of structural parts and reinforcements in premium battery electric vehicles (BEVs).

“The automotive industry sees a need for new material solutions for battery components with superior flame retardancy compared to conventional thermoset prepregs and aluminum, and which allow passengers sufficient escape time in the event of a thermal runaway.” explains Stefano Montani, Transportation Marketing Manager at Solvay. “Structural battery housing solutions must also ensure reliable EMI shielding performance and enable efficient processing of large volumes at high production rates. Our new SolvaLite[®] prepreg combines all these properties with a significant [lightweighting potential](#) compared to incumbent solutions.”

SolvaLite[®] 716 FR is primarily targeted at flame-retardant battery enclosure applications for premium and super-premium BEVs. It has a dry glass transition temperature (T_g) of 145°C (293 °F) and has shown to outperform aluminum and discontinuous fiber composites in practical UL 2596 flammability tests by providing protection at a wall thickness of 2mm. Beyond the automotive industry, the new material also opens up a wide potential for other components where fire safety is key to meeting general UL94 V-0 specifications.

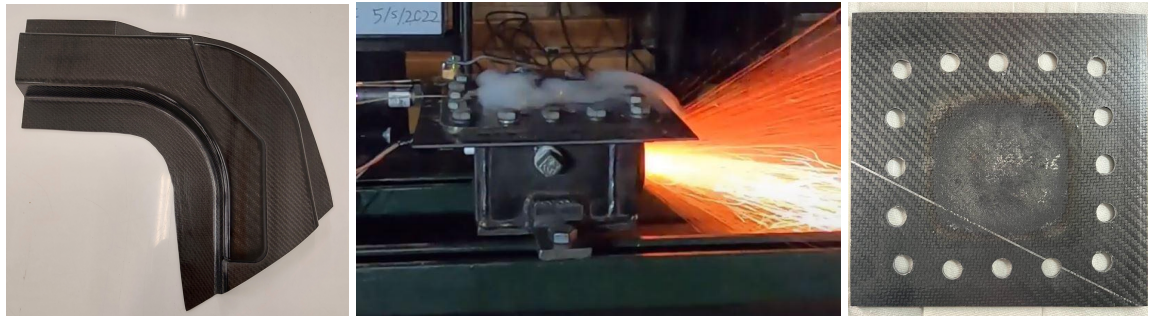
This system is designed for rapid curing, offering a press cure time of eight minutes at 150°C (302°F); with higher temperature and shorter cycle time capability designed to help converters achieve more efficient production routes, such as [Solvay's proprietary Double Diaphragm Forming \(DDF\) technology](#). SolvaLite[®] 716 FR is available in a carefully selected range of formats and continuous fiber types aimed at meeting the most demanding mechanical requirements, under worst-case loading conditions, minimizing component thicknesses and optimizing enclosure volume for increased volumetric energy density or vehicle z-height.



SolvaLite® 716 FR will be commercially available by the end of 2023 and will be officially launched at the upcoming CAMX Composites and Advanced Materials Expo in Atlanta from October 30 to November 02, where Solvay will be exhibiting at booth W46.

In addition, Stefano Montani and Solvay's Senior Customer Technical Development Engineers Dhaval Jetavat and David Hulme will host a [webinar on Fast-Cure Epoxy Solutions for High Volume Battery Enclosures and Body Panels](#) at 17:00 hours CET on November 30, 2023.

SolvaLite® is a registered trademark of Solvay.



UL 2596 flame test performed on a SolvaLite® 716 FR component - before and after. (Photo: Solvay)

About Solvay

Solvay is a science company whose technologies bring benefits to many aspects of daily life. With more than 22,000 employees in 61 countries, Solvay bonds people, ideas and elements to reinvent progress. The Group seeks to create sustainable shared value for all, notably through its Solvay One Planet plan crafted around three pillars: protecting the climate, preserving resources and fostering better life. The Group's innovative solutions contribute to safer, cleaner, and more sustainable products found in homes, food and consumer goods, planes, cars, batteries, smart devices, health care applications, water and air purification systems. Founded in 1863, Solvay today ranks among the world's top three companies for the vast majority of its activities and delivered net sales of €13.4 billion in 2022. Learn more at www.solvay.com.

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