



Progress beyond

Solvay Introduces New KetaSpire® PEEK Grade for Precision ABS/ESC Brake & E-Mobility Components

High-performance properties and increased productivity to enable better sealing and mechanical product characteristics

Alpharetta, GA, July 28, 2021

Solvay has announced the launch of a new grade of KetaSpire® PEEK, KT-850 SCF 30, designed for precision brake system and [e-mobility](#) electronic pump components. The product was developed to provide better sealing performance over standard 30% carbon fiber filled PEEK grades.

Carbon fiber filled PEEK has traditionally been used for anti-lock brake system (ABS) and electronic stability control (ESC) components, such as tappets, poppets and plungers. The new KT-850 SCF 30 grade enables further metal (aluminum) replacement by improving the flow characteristics of the material and the surface finish of parts.

ABS/ESC plungers play a critical role in the function of the system's hydraulic unit. The system combines an electronic pump, an electronic control unit (ECU), valves which control braking pressure at the wheels, and sensors that measure the speed of the wheels. The plunger is responsible for operating the valve's movement by controlling the brake fluid supply.

Replacing metal with polymeric plungers requires a material like KetaSpire® KT-850 SCF 30 which provides a balance of high performance properties including coefficient of friction, mechanical strength, dimensional tolerance control, and sealing capability.

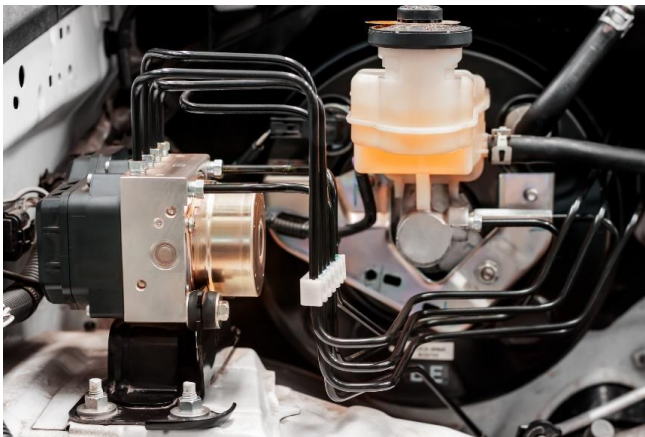
The replacement of aluminum in precision components, such as ABS plungers, allows for overall cost reductions as well as improved productivity. KetaSpire® KT-850 SCF 30 offers the flowability required for filling the parts, which are approximately 15 mm in length, while also meeting the tight tolerances required for ABS/ESC plungers. KetaSpire® KT-850 SCF 30 outperformed the processability offered by incumbent materials, allowing for much higher production yields and an enhanced surface finish, enabling better sealing and mechanical performance.



“The new carbon-filled [KetaSpire® PEEK](#) grade comes at a critical time when manufacturers are looking for enhanced sealing and mechanical performance. This means it is a real solution for the [e-mobility](#) market and we are proud it is part of our complete range of high-performance solutions for brake systems,” states Brian Baleno, Head of Marketing – Transportation at Solvay’s Materials Segment. “The specialized portfolio also includes [Amodel® PPA](#) for ABS/ESC pistons, motor end caps, solenoids, brake booster sensors, and e-parking brake housings; [Ryton® PPS](#) for brake pistons and valve housings, and [Fomblin® PFPE](#) for electric parking brake lubricants.”

As part of Solvay’s One Planet commitment to sustainability, the company utilizes 100% renewable electricity in the production of its PEEK, PPA and PPS base polymers in the United States, and is the only manufacturing company among the Top 10 Corporate Solar Users in the ranking of the Solar Energy Industries Association.

Amodel®, Ryton®, KetaSpire® and Fomblin® are registered trademarks of Solvay.



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(Photo: Solvay, PR002)

About Solvay

Solvay is a science company whose technologies bring benefits to many aspects of daily life. With more than 23,000 employees in 64 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 roadmap crafted around three pillars: protecting the climate, preserving resources and fostering a 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 €9 billion in 2020. Solvay is listed on Euronext Brussels and Paris (SOLB), and in the United States, where its shares (SOLVY) are traded through a Level I ADR program. Learn more at www.solvay.com.

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