

## Solvay Specialty Polymers Unveils New Ultra-High Molecular Weight Grade of KetaSpire® PEEK

*KetaSpire® KT-810 Delivers Greater Ductility  
and Toughness than Current PEEK*

**ALPHARETTA, Ga., November 7, 2013** – [Solvay Specialty Polymers](#) has announced the commercial introduction of a new ultra-high molecular weight grade of [KetaSpire® polyetheretherketone \(PEEK\)](#) that offers greater ductility and toughness than standard high-molecular weight PEEK products. The grade was developed to meet the demands of applications requiring enhanced toughness and impact resistance performance over traditional PEEK grades. The product is particularly suited to meet the ever-increasing performance needs of the [oil and gas industry](#).

KetaSpire® KT-810 has a melt viscosity ranging from 0.51-0.65 kPa-s compared to 0.38-0.50 kPa-s for standard high-viscosity PEEK grades. The new grade achieves a greater level of mechanical toughness than previously possible with current commercial PEEK materials and is still processable by conventional methods including extrusion, injection molding, and compression molding.

“Solvay already offers PEEK grades with higher overall toughness properties relative to competitive products, and the introduction of this grade takes this advantage to yet another level,” said Jamal El-Hibri, principal scientist for Solvay Specialty Polymers.

KetaSpire® KT-810 delivers about a 50% improvement in tensile elongation at break and a 10% to 20% increase in impact resistance compared to standard high-molecular weight PEEK grades. The material is available in two forms: fine powder with an average particle size of approximately 50 micrometers (µm) for compression molding, and pellet form for extrusion and injection molding. The fine powder grade is designated KT-810FP while the pelletized product is available as KT-810 NT.

KetaSpire® KT-810 is particularly suited for compression molding applications such as machined parts and stock shapes wherein the inherent slow cooling rates of the process limit PEEK’s toughness and often result in brittleness due to the higher crystallinity levels attained in this process. KT-810 is more ductile and resistant to cracking during demolding and machining. It also provides greater toughness in PEEK formulations where additives and fillers are used in conjunction with compression molding.

The ultra-high molecular weight grade is targeted for [semiconductor](#) and [oil and gas](#) applications where components are often machined from thick compression molded billets or from extruded or injection molded stock shapes. The new PEEK grade has been successfully qualified and is commercially available.

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### 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 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 and Cable, and other industries. Learn more at [www.solvay.com](http://www.solvay.com).

As an international chemical group, [SOLVAY](#) assists industries in finding and implementing ever more responsible and value-creating solutions. The Group is firmly committed to sustainable development and focused on innovation and operational excellence. Solvay serves diversified markets, generating 90% of its turnover in activities where it is one of the top three worldwide. The group is headquartered in Brussels, employs about 29,000 people in 55 countries and generated 12.4 billion euros in net sales in 2012. Solvay [SOLB.BE](#) is listed on [NYSE Euronext](#) in Brussels and Paris (Bloomberg: [SOLB.BB](#) - Reuters: [SOLB.BR](#)).

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