

Solvay Booth #1158, Hall 1 | The Battery Show Europe 2019

Solvay spotlights materials for battery packs and immersion cooling

Stuttgart, GERMANY, May 7, 2019 --- Solvay's specialty polymers are replacing heavy, expensive metal components for safer, higher-density batteries. In battery packs and modules, Solvay's lightweighting, high-performance polymers provide design flexibility, cost reduction, corrosion and chemical resistance, electrical insulation and processing ease. Solvay's cooling agents for battery packs support electrical and chemical safety, cooling efficiency and direct cooling.

Solvay's semi-crystalline polymers for metal replacement include Amodel® polyphthalamide (PPA), Ryton® polyphenylene sulfide (PPS), and Ixef® polyarylamide (PARA). These materials combine high mechanical strength, good chemical resistance, flame retardancy, and dimensional stability. Amodel® PPA has a comparative tracking index (CTI) of more than 600 volts (V) for strong electrical insulation, making it particularly well suited for high voltage components needing good flexibility and superior moisture resistance.

For battery direct immersion cooling, Solvay's <u>Galden® perfluoropolyether (PFPE)</u> is an inert, fluorinated fluid that provides high thermal stability, a wide range of operating temperatures, good dielectric properties, and excellent chemical inertness. This heat transfer fluid is well suited for liquid coolant for battery packs as it has no flash or fire point. Galden® PFPE is also compatible with standard metals and plastics, maintains stable properties over use and time, and reduces the risk of short circuits, corrosion and cross-contamination.

"Solvay continues to make significant investments in next-generation products, technologies and material solutions that support the increasingly important global battery space," said Dr. Tao Chuanqi, global business development manager for Alternative Energy at Solvay's Specialty Polymers global business unit. "Further, Solvay's comprehensive portfolio of advanced battery solutions are enhancing lithium ion battery performance, and helping to meet new vehicle electrification requirements such as miniaturization, thin walls, high temperatures, high humidity, and electric pressure."

Solvay's technical experts are available for the duration of <u>The Battery Show Europe 2019</u> (Booth #1158, Hall 1) to answer questions on the company's extensive portfolio of materials for the battery market and offer additional information about polymer selection, application design, and material processing.

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Solvay is an advanced materials and specialty chemicals company, committed to developing chemistry that addresses key societal challenges. Solvay innovates and partners with customers worldwide in many diverse end markets. Its products are used in planes, cars, batteries, smart and medical devices, as well as in mineral and oil and gas extraction, enhancing efficiency and sustainability. Its lightweighting materials promote 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 62 countries. Net sales were €10.3 billion in 2018, with 90% from activities where Solvay ranks among the world's top 3 leaders, resulting in an EBITDA margin of 22%. Solvay SA (SOLB.BE) is listed on Euronext Brussels and Paris (Bloomberg: SOLB.BB) - Reuters: SOLB.BR) and in the United States its shares (SOLVY) are traded through a level-1 ADR program. Financial figures take into account the announced divestment of Polyamides.

Solvay Specialty Polymers manufactures over 1500 products across 35 brands of high-performance polymers – fluoropolymers, fluoroelastomers, fluorinated fluids, semi-aromatic polyamides, sulfone polymers, ultra-high performance aromatic polymers, and high-barrier polymers – for use in Aerospace, Alternative Energy, Automotive, Healthcare, Membranes, Oil & Gas, Packaging, Plumbing, Semiconductors, Wire & Cable, and other industries. Learn more at www.solvayspecialtypolymers.com.

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Press Release

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