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**SOLVAY SUPPORTS SOLAR IMPULSE'S TAKEOFF  
WITH INNOVATIVE MATERIALS AND KNOWHOW*****First solar-powered airplane contains 11 Solvay products***

As a founding sponsor, Solvay is proud to announce that the Solar Impulse HB-SIA, the solar-powered airplane built to fly without consuming any fuels, achieved airborne flight for the first time today. This historic first in aviation history took place on Thursday 3 December at 1:11 pm at the Dübendorf airport near Zürich, Switzerland. Solvay's knowhow, solutions and ultra high-performance polymer products delivered the essential components necessary to make Solar Impulse's successful takeoff a reality.

Solvay has embodied the Solar Impulse values throughout its 150-year history. Those values include a pioneering spirit, the human dimension, environmental awareness, innovation, and an abiding conviction that chemistry and life sciences play an indispensable role in meeting the challenges of tomorrow. "I congratulate the Solar Impulse and Solvay teams that helped bring this remarkable accomplishment to life", says Christian Jourquin, Solvay's CEO. "The successful takeoff of Solar Impulse demonstrates that Solvay's innovative materials and solutions are an essential part of technological and human progress", he adds.

Solvay's contribution in advanced material knowhow and solutions included incorporating ultra-light, performance polymers that outperform heavier metal options. In total, 11 Solvay polymers and products were used to create the more than 6,000 parts used on the Solar Impulse in various applications and devices such as components for the throttle box, monitor control unit, battery fixation and bushings-bearings.

Other applications and solutions include ball bearings, bolts and screws, washers, shafts, hinges, spacers and other mechanical pieces Torlon<sup>®</sup> PAI (polyamide-imide), KetaSpire<sup>®</sup> PEEK (polyetheretherketone) and PrimoSpire<sup>®</sup> SRP (self reinforced polyphenylene) were the primary ultra-high performance plastics used in these and many other applications and parts. Additionally, Fomblin<sup>®</sup> PFPE-based, temperature-resistant lubricant allows the plane to fly in extreme conditions. The cockpit and motor gondolas, made of special polyurethane foam prepared with a Solvay foaming agent, also can withstand extreme temperatures.

Solvay's polymers and chemicals such as Solef<sup>®</sup>, F1EC and Halar<sup>®</sup> ECTFE were instrumental in improving the energy system of the plane. Solef<sup>®</sup> and F1EC by realizing energy savings and energy density of the Lithium ion batteries and Halar<sup>®</sup> as ultra-resistant protection film for the ultra thin photovoltaic cells. Solvay also supplied testing services, consultation and performed the non-linear stress simulations of the polymer assemblies. The results of these simulations were later validated during the stress test of the assemblies.

**SOLVAY** is an international chemical and pharmaceutical Group with headquarters in Brussels. It employs more than 29,000 people in 50 countries. In 2008, its consolidated sales amounted to EUR 9.5 billion, generated by its three sectors of activity: Chemicals, Plastics and Pharmaceuticals. Solvay is listed on the NYSE Euronext stock exchange in Brussels (NYSE Euronext: SOLB.BE - Bloomberg: SOLB.BB - Reuters: SOLBt.BR). Details are available at [www.solvay.com](http://www.solvay.com).

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