



# SOLVAY ADVANCED POLYMERS

**For Immediate Release**

## **Solvay Advanced Polymers Joins Forces with Mitsubishi Gas Chemical on Bio-Based Polyamides**

*Collaboration Targets Development of High-Temperature Nylons*

**DUSSELDORF, Germany, October 25, 2010** – Solvay Advanced Polymers, LLC, is collaborating with Mitsubishi Gas Chemical Co. Inc. (MGC), Tokyo, on the development of a unique line of renewably-sourced specialty polymers. The joint work is initially focused on the introduction of high-temperature bio-based polyamides for high-performance durable applications. With a heat deflection temperature of approximately 270°C for glass-filled compounds, the new polymer will have greater thermal performance than many current bio-based polyamides and polyesters.

Under the collaboration, the two companies plan to build upon MGC's development of a new monomer which will be used to co-develop a new line of specialty polymers. These high-performance polyamides, based on bio-based Sebacic acid derived from castor oil, are expected to be among the highest temperature bio-based polyamides in the industry and will nicely complement Solvay's high-temperature Amodel<sup>®</sup> polyphthalamide (PPA) product line.

MGC has worked closely with Solvay Advanced Polymers over the last 25 years as

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supplier of MXDA monomer used to produce Solvay's Ixef<sup>®</sup> polyarylamide (PARA).

“This unique collaboration brings together two world-class companies who seek to extend the performance profile of bio-based polyamides,” said George Corbin, president of Solvay Advanced Polymers. “This is driven by environmentally-conscious manufacturers who are continually striving for new sustainable alternatives.”

Corbin added that Solvay's expertise in polymerizing and compounding high-heat polyamides, being the first company to commercialize this class of polymer in the late 1980's under the Amodel tradename, and its extensive knowledge and global reach in high-performance plastics bring significant value to the relationship.

“We're very positive about the valuable synergies resulting from this joint development work,” said Chikara Morishima, general manager, Aromatic Chemicals Division 1, Aromatic Chemicals Co. for MGC. “The expertise of MGC and its affiliates in aminated monomers and polymers and Solvay's leading global marketing activity in high-temperature polymers make this a strong team capable of opening up new doors in bio-based polyamides.”

The new material boasts low moisture retention, a high crystallization rate, excellent wear resistance, and good toughness. Key potential uses include reflow soldering applications, high-temperature automotive parts, and sliding applications (gears).

Solvay and MGC are currently working together to develop an optimized manufacturing process for the new polymer. Meanwhile, MGC has filed numerous patents to cover its extensive development work in resin composition, production, and applications.

The multi-year development project will examine market viability, commercial scale-up, and capital planning.

### **About Mitsubishi Gas Chemical Co.**

Mitsubishi Gas Chemical (MGC), based in Tokyo, is a global supplier of a wide range of materials from methanol, xylene, hydrogen peroxide, and other basic chemicals through to life-science products, metaxylene derivatives, electronic chemicals, and other fine chemicals. The company is divided into four business segments: Natural Gas Chemicals, Aromatic Chemicals, Speciality Chemicals, and Information and Advanced Materials. For more information, visit [www.mgc.co.jp](http://www.mgc.co.jp)

### **About Solvay Advanced Polymers**

Solvay Advanced Polymers, LLC produces more plastics with more performance than any other company in the world. This gives design engineers worldwide more ways to solve top design challenges in automotive, medical, electronics, aerospace and other demanding industries. Learn more at [www.solvayadvancedpolymers.com](http://www.solvayadvancedpolymers.com).

Solvay is an international industrial Group active in Chemistry. It offers a broad range of products and solutions that contribute to improving quality of life. The Group is headquartered in Brussels and employs 17,000 people in over 40 countries. In 2009, its consolidated sales amounted to EUR 8.5 billion. 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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