Joint News Release

BASF and Avantium intend to establish joint venture

- **Production and marketing of furandicarboxylic acid (FDCA) based on renewable resources, the main new building block for polyethylenefuranoate (PEF)**
- **Further development and licensing of Avantium's production processes for FDCA and PEF at industrial scale**
- **Intention to build a reference plant for FDCA with an annual capacity of up to 50,000 tons at BASF's Verbund site in Antwerp, Belgium**

Ludwigshafen, Germany, and Amsterdam, Netherlands – March 15, 2016 – BASF and Avantium today announced that they have signed a letter of intent and entered into exclusive negotiations to establish a joint venture (JV) for the production and marketing of furandicarboxylic acid (FDCA), as well as marketing of polyethylenefuranoate (PEF), based on this new chemical building block. FDCA is produced from renewable resources.

The JV will use the YXY process® developed by Avantium in its laboratories in Amsterdam and pilot plant in Geleen, Netherlands, for the production of FDCA. It is intended to further develop this process as well as to construct a reference plant for the production of FDCA with an annual capacity of up to 50,000 metric tons per year at BASF's Verbund site in Antwerp, Belgium. The aim is to build up world-leading positions in FDCA and PEF, and subsequently license the technology for industrial scale application.

FDCA and PEF: New materials enabling improved food packaging films and plastic bottles

FDCA is the essential chemical building block for the production of PEF. Compared to conventional plastics, PEF is characterized by improved barrier properties for gases like carbon dioxide and oxygen. This can lead to longer shelf life of packaged products. Due to its higher mechanical strength, thinner PEF packaging can be produced, thus a lower amount of packaging material is necessary. Therefore PEF is particularly

suitable for the production of certain food and beverage packaging, for example films and plastic bottles. After use, PEF can be recycled.

“With the planned joint venture, we want to combine Avantium’s specific production technology and application know-how for FDCA and PEF with the strengths of BASF,” said Dr. Stefan Blank, President of BASF’s Intermediates division. “Of particular importance is our expertise in market development and large-scale production as an established and reliable chemical company in the business of intermediates and polymers,” Blank added.

“The contemplated joint venture with BASF is a major milestone in the development and commercialization of this game-changing technology. Partnering with the number one chemical company in the world, provides us with access to the capabilities that are required to bring this technology to industrialization,” said Tom van Aken, Chief Executive Officer of Avantium. “The joint venture will further strengthen the global technology and establish the market leadership for FDCA and PEF. With BASF, we plan to start production of FDCA to enable the first commercial launch of this exciting bio-based material and to further develop and grow the market to its full potential,” van Aken continued.

About Avantium

Avantium is a leading chemical technology company and a forerunner in renewable chemistry. Together with its partners around the world, Avantium develops efficient processes and sustainable products made from biobased materials. Avantium offers a breeding ground for revolutionary renewable chemistry solutions. From invention to commercially viable production processes. One of Avantium’s many success stories is YXY technology®, with which they created PEF: a completely new, high-quality plastic made from plant-based industrial sugars. PEF is 100% recyclable. It therefore offers a cost-effective solution to make anything from a wide range of plastic bottles and packaging to fibers. YXY is the most advanced technology, but Avantium is also working on a host of other ground-breaking projects and is providing advanced catalysis research services and systems to the leading chemical and petrochemical companies. Avantium’s offices and headquarters are based in Amsterdam, the Netherlands. Further information at www.avantium.com

About BASF Intermediates

The BASF Group’s Intermediates division develops, produces and markets a comprehensive portfolio of about 700 intermediates around the world. Its most important product groups include amines, diols, polyalcohols, acids and specialties. Intermediates are used for example as starting materials for coatings, plastics, pharmaceuticals, textiles, detergents and crop protectants. Innovative intermediates

from BASF help to improve both the properties of final products and the efficiency of production processes. The ISO 9001 certified Intermediates division operates plants at production sites in Europe, Asia and North America. Around the globe, the division generated sales to third parties of about €2.8 billion in 2015. Further information at www.intermediates.basf.com

About BASF

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. The approximately 112,000 employees in the BASF Group work on contributing to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is organized into five segments: Chemicals, Performance Products, Functional Materials & Solutions, Agricultural Solutions and Oil & Gas. BASF generated sales of more than €70 billion in 2015. BASF shares are traded on the stock exchanges in Frankfurt (BAS), London (BFA) and Zurich (AN). Further information at www.basf.com

Media contacts:

BASF SE

Klaus-Peter Rieser
Intermediates Division
Phone: +49 621 60 95138
E-mail: klaus-peter.rieser@basf.com

Avantium

Alex de Vries
Phone: +31 20 586 0132
Mobile: + 31 651 11 9205
E-mail: alex.de.vries@msl.nl