



Joint news release

September 19, 2017

A new dimension for the furniture industry: BASF and Sonae Arauco win AVK Innovation Award 2017 for 3D moldable wood fiber composites

- New acForm[™] binder technology enables thermoformable wood fiber composites to be manufactured on existing standard MDF production lines
- 3D moldability opens up new design options for the furniture industry

Porto/Ludwigshafen, September 19, 2017 – At the International Composites Congress in Stuttgart, BASF and Sonae Arauco were jointly honored with the AVK (German Federation of Reinforced Plastics) Innovation Award 2017 for a new development in 3D moldable wood fiber components. The two companies ranked first in the category "Innovative products/components or applications" for providing the furniture industry with a storage stable composite that can be processed by hot molding.

In contrast to standard thermoset boards, the new wood-based composite is able to be post-molded and its surface can be structured in short cycles on standard furniture molding equipment.

The novel wood composites are based on BASF's new binder technology, acForm. Its application is using Sonae Arauco wood refining technology which is adjusted to be used without any productivity restrictions. Due to the specific binder-fiber composition the composite allows all three spatial axes to be formed at the same time.

"Our new composites greatly facilitate the thermo-molding and thermo-embossing processes, because several production steps, including veneer gluing and layering, are no longer necessary," says Dr. Thorsten Habeck, Head of BASF's marketing unit Dispersions for Fiber Bonding Europe, Middle East & Africa. "This allows much shorter cycle times than separate layering and a significant productivity increase."

In addition, the composites can be used to produce highly structured or curved components. This opens up new design options for application fields like door and furniture fronts, wall or ceiling linings, room dividers, partition walls in open-plan offices or structured flooring.

acForm also sets new standards in terms of work place health and safety, meeting the most stringent regulations because formaldehyde is not added to the binder system.

The production of 3D moldable composites is using Sonae Arauco's continuous wood refining technology, ensuring consistency of materials and improved environmentally-friendly products. "The composites are "ready to be converted" materials ensuring higher productivity and lower costs for customers versus current conventional embedded processes such as plywood, deep rooted panels, bended HDF, allowing exhaustive applications in all segments of the furniture and construction market", says Adelaide Alves, Manager Product Development Sonae Arauco.

The AVK Innovation Award acknowledges innovations in the field of fiber reinforced plastics (FRPs)/composites in four different categories. The award promotes the development of new products/components and applications using FRPs as well as new procedures and processes for manufacturing FRP based products.

About Sonae Arauco

Sonae Arauco is a wood-based 50/50 Joint venture between two strong brands: Sonae Indústria and Arauco. With 21 industrial and commercial units in 8 countries on 2 continents, and with circa 2800 employees around the globe, Sonae Arauco is one of the largest wood-based panel producers worldwide. The production capacity amounts to about 4,185 million cubic meters, and the turnover is Euro 812 million. The inspirational wood solutions are available in over 75 countries. www.sonaearauco.com

About BASF's Dispersions & Pigments Division

The Dispersions & Pigments division of BASF develops, produces and markets a range of high-quality pigments, resins, additives and polymer dispersions worldwide. These raw materials are used in formulations for coatings and paints, printing and packaging products, construction chemicals, adhesives, fiber bondings, plastics and paper as well as for electronic applications such as displays. With its comprehensive product portfolio and its extensive knowledge of the industry, the Dispersions & Pigments division offers its customers innovative and sustainable solutions and helps them advance their formulations. For further information about the Dispersions & Pigments division, please visit www.dispersions-pigments.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 114,000 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 about €58 billion in 2016. BASF shares are traded on the stock exchanges in Frankfurt (BAS), London (BFA) and Zurich (BAS). Further information at www.basf.com.

Media Contacts:

BASF SE Sonae Arauco Deutschland GmbH Christian Hinke Dagmar Grabolle

Phone: +49 621 60 49277 Phone: +49 5234 848 223

<u>christian.hinke@basf.com</u> <u>dagmar.grabolle@sonaearauco.com</u>