

News Release



BASF develops a material for window profiles with high thermal insulation based on engineering plastic Ultradur®

- **Glass fiber-reinforced co-extrudable Ultradur® replaces steel in window profile**
- **Greiner Extrusion Group contributes expertise for suitable tooling**

The construction industry is faced with major challenges in the coming years. In new buildings, restorations and interior construction, it will be essential to employ forward-looking and sustainable products. BASF has now developed an Ultradur® (PBT, polybutylene terephthalate), modified for co-extrusion with PVC, that replaces steel in PVC windows as the stiffening element. The outcome is impressive because the window is equally strong while being lighter and more cost-effective. Its insulation performance is also superior, with the U_f value being significantly reduced by 0.1 W/(mK).

Ultradur® simplifies production and cuts costs

The BASF plastic Ultradur® is put to use in numerous industry applications in high-grade and highly stressed technical components. The material specially developed from an Ultradur® blend reinforced with glass fibers offers profile manufacturers and window constructors numerous advantages. "Thanks to its simplified production and cost-effectiveness, our new Ultradur® gives both profile manufacturers and window constructors a competitive edge in the marketplace," says Dr. Kay Brockmüller, Project Manager Construction at BASF.

October 4th, 2017
P331/17e
Dr. Sylvia Kaufmann
Tel. +49 5443 12 2238
sylvia.kaufmann@basf.com

Pay us a visit at Fakuma,
Friedrichshafen, 10/17-21/2017, Hall
B4, Booth 4306

CORPUS No. 6

The digital
Construction Magazine
from BASF



For [iOS](#) and [Android](#)

BASF SE
67056 Ludwigshafen
Germany
Tel. +49 621 60-0
<http://www.basf.com>
Media Relations
Tel. +49 621 60-20916
Fax +49 621 60-92693
presse.kontakt@basf.com

Benefits for profile manufacturers and window constructors

An attractive feature for profile manufacturers is the possibility of co-extrusion with PVC. Highly rigid Ultradur® binds with PVC and, in the right position, can replace conventional steel stiffeners in profiles. The co-extruded profile is weldable and undergoes the same downstream treatment as other profiles. The process also permits the best-possible reinforcement geometry for the profile in question.

For window constructors, the production effort is reduced considerably, as all the steel-associated activities are eliminated. In the chain from purchase through to processing, several steps are omitted, thus avoiding the potential for error in steel handling at the same time. Handling – be it during the dyeing of the corners or installation in the building – is additionally simplified, as the profile reinforced with Ultradur® is much lighter. A further positive feature for the ultimate customer, in addition to improved insulation performance, is that the profile shows high dimensional stability and virtually no tendency to shrink after installation.

Fast track to the mass-produced item

BASF offers profile manufacturers technical support with the development of new Ultradur® profiles. Greiner Extrusion Group, the Austrian supplier of extrusion lines, tooling and complete production plants for profile extrusion, can deliver dependable series tooling for the co-extrusion of Ultradur® with PVC at short notice. Leopold Weiermayer, Technical Manager at the Greiner Extrusion Group, sees huge potential in this: “With the expertise developed by Greiner for the necessary pronounced forward orientation of the fibers in the direction of extrusion combined with smooth running, we can offer tooling for this promising co-extrusion market.” BASF and the Greiner Extrusion Group are cooperating in this area to give customers rapid access to this technology, says Brockmüller: “This technology is highly exciting for many profile manufacturers and window constructors, but it calls for elaborate development steps in the tooling

sector. Fortunately these have been taken by Greiner.”

Further details can be obtained at our booth at FAKUMA, October 17-21, 2017; Hall B4, Booth 4306

About BASF's Performance Materials Division

BASF's Performance Materials division encompasses the entire materials know-how of BASF regarding innovative, customized plastics under one roof. Globally active in four major industry sectors – transportation, construction, industrial applications and consumer goods – the division has a strong portfolio of products and services combined with a deep understanding of application-oriented system solutions. Key drivers of profitability and growth are our close collaboration with customers and a clear focus on solutions. Strong capabilities in R&D provide the basis to develop innovative products and applications. In 2016, the Performance Materials division achieved global sales of € 6.9 bn.

More information online: www.performance-materials.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.

About Greiner Extrusion Group

The Greiner Extrusion Group is the worldwide leading supplier of extrusion lines, tooling and complete systems for profile extrusion. The core competence is process expertise in profile extrusion – development, design, manufacture and process optimization of tooling and extrusion lines. The service portfolio ranges from formulation development to extrusion lines and from tooling to the engineering of complete production plants. At 10 production and service locations in Europe, the United States and Asia, complete solutions are provided for all profile manufacturer requirements worldwide.

Further information available on the Internet at:

www.performance-materials.basf.com

www.polyurethanes.basf.de

[CORPUS Magazine – Android-App auf Google Play](#)

[CORPUS Magazine – iOS-App im Apple Store](#)

www.greiner-extrusion-group.com