

News Release

BASF's innovative HFO-blown PIR system improves energy efficiency of insulation sandwich panels

■ Provides enhanced non-flammability and thermal conductivity in insulation sandwich panels

Japan – February 14, 2024 – BASF's innovative PIR (Polyisocyanurate) System made with Hydrofluoroolefin (HFO) as a blowing agent, is used for the first time in continuous sandwich panel applications. HFO significantly lowers Global Warming Potential (GWP) and zero Ozone Depletion Potential (ODP). The improved thermal conductivity further translates to a more energy-efficient PIR insulation system, which contributes to a reduction in carbon emissions.

The innovative HFO-blown PIR system also provides insulation sandwich panels with enhanced non-flammability and thermal conductivity – which has been instrumental in helping customers such as TATUMI Industrial Co., Ltd (TATUMI), a Japanese insulation manufacturer, produce insulation sandwich panels that pass the stringent flammability certification tests required by the Japanese Building Code.

“Our collaboration with BASF is a testament to the power of teamwork and a shared vision. With our state-of-the-art production line, HFO-blown PIR systems meet the market demand for more environmentally friendly and non-flammable material solutions. We expect our pioneering solutions to become the industry standard, and help us gain an advantageous position in the Japanese market,” said Mr. Hiroyuki Iwane, President, TATUMI.

The PIR system also provides long-term durability and mechanical strength.

“The team at TATUMI and BASF worked closely to achieve the development of this sustainable and innovative insulation panel with one patent application already filed. Moving forward, we will continue collaborating with TATUMI to expand further and redefine the possibilities of the insulation panel market. This includes applications such as large refrigerator freezer, ultra-low temperature freezers, food factories, medical freezers, clean rooms requiring constant temperature, and data center cooler” said Rachib de Matos Zeidam, Business Management, Performance Materials Japan, BASF.

About TATUMI Kogyo

Tatumi Kogyo K.K., headquartered in Kawasaki, Kanagawa, Japan, has been a leader in the design, manufacture, assembly, and installation of a diverse range of cooling and environmental solutions since its inception in April 1962. With a significant capital of 70 million yen, the company has shown steadfast growth and dedication to quality and innovation. Tatumi Kogyo K.K. specializes in the design, manufacture, assembly, and installation of: Prefabricated refrigerators for commercial use, Prefabricated freezers and refrigerators, Commercial refrigerators, clean rooms, Soundproof rooms, Complete air conditioning and heating works. Tatumi Kogyo K.K. is proud to serve a wide range of esteemed clients including, but not limited to, 7-Eleven Japan, Lawson, Family Mart, Starbucks Coffee, Westin Hotel Tokyo, Asahi Beer, Bunmeido, NHK Broadcasting Technology Research Institute, US military bases, National Yokohama Hospital, Sony Research Institute, Sanrio Puroland, and more. For more details or inquiries, please visit our official website <https://tatumikougyou.co.jp/>

About BASF

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. More than 111,000 employees in the BASF Group contribute to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio comprises six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of €87.3 billion in 2022. BASF shares are traded on the stock exchange in Frankfurt (BAS) and as American Depositary Receipts (BASFY) in the United States. Further information at www.basf.com.

About BASF's Performance Materials division

BASF's Performance Materials division is at the forefront of the much-needed sustainability transformation in plastics. Our products are co-created with customers around the globe to bring innovations to four major industry sectors – transportation, consumer goods, industrial applications, and construction. Our R&D focuses on all stages of the plastics journey: Make, Use and Recycle. The MAKE phase is about improving how plastics are made, from product design to the choice of

raw materials and the manufacturing process itself. The USE phase enhances plastics' strengths such as light weight, robustness, and thermal resistance. At the end of the product lifecycle, the RECYCLE phase looks at how to close the loop to achieve a circular economy. In 2022, the Performance Materials division achieved global sales of €8.5 billion. Join #ourplasticsjourney at: www.plastics.basf.com