

News Release

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BASF broadens its Monomers Portfolio and launches bio-based 2-Octyl Acrylate

- First commercial scale production of bio-based 2-Octyl Acrylate
- ¹⁴C content of 73% according to ISO 16620
- High performance and easy to use in a broad range of applications

Ludwigshafen, Germany – BASF is expanding its growing portfolio of bio-based monomers with a proprietary process for production of 2-Octyl Acrylate (2-OA). The new product underlines BASF's strong commitment to innovation for a sustainable future with 73% ¹⁴C-tracable bio-based content according to ISO 16620. Besides the regular bio-based 2-Octyl Acrylate, BASF also launched the new product as 2-Octyl Acrylate BMB ISCC Plus. Here, the remaining carbon content is ISCC PLUS certified, and by applying BASF's biomass balance (BMB¹) approach, this variant offers a further reduced product carbon footprint (PCF²).

With an industrial-scale production setup at its Verbund site in Ludwigshafen, Germany, BASF has a pioneering role when it comes to producing 2-Octyl Acrylate in large volumes. This allows BASF to make the bio-based monomer globally available as a raw material. "We have broadened our product portfolio to support customers on their sustainability journey. With 2-OA, we are proud to have launched a novel acrylic monomer that helps customers to meet their sustainability goals," says Dr. Reiner Geier, Senior Vice President Industrial Petrochemicals Europe.

BASF's 2-Octyl Acrylate uses 2-Octanol as the respective bio-based feedstock. This bio-alcohol is based on <u>castor oil</u>, a sustainable non-edible feedstock which is reliably available throughout the year.

With its balanced solvency, 2-Octyl Acrylate can easily be used as bio-based alternative to fossil-based monomers such as 2-Ethylhexyl Acrylate (2-EHA) and n-Butyl Acrylate (BA) e.g. in adhesives formulations, or coatings applications.

The new product also offers performance benefits compared to fossil alternatives, showing improved scrub resistance in coatings, shear resistance in adhesives and excellent weatherability. Therefore, 2-Octyl Acrylate is one of the few bio-based monomers which can be used in both standard and high-performance applications. The high purity of BASF's 2-Octyl Acrylate provides a reliably high quality, with low volatile organic compounds (VOC) and enables customers to use the monomer in a broad application range.

BASF's 2-Octyl Acrylate is already registered in the EU, the US, Japan and many other countries. Further registrations are ongoing.

About BASF's Petrochemicals division

The Petrochemicals division is the starting point for BASF's petrochemical-based value chains globally. We operate a highly competitive asset base with best-in-class technologies and set the benchmark in safety, sustainability, operational excellence and cost competitiveness. With six Verbund sites and several major production sites, we are close to our customers and present in the largest chemical markets worldwide. The division supplies various value chains across the company and a broad range of customer industries with high-quality chemicals, putting our customers in the center of everything we do and contributing to the organic volume growth of BASF. Our portfolio includes cracker products, industrial gases, acrylics, superabsorbent polymers, styrenic foams, alkylene oxides, glycols, alcohols, solvents and plasticizers. In 2022, the Petrochemicals division generated sales to third parties of about €10.6 billion. Further information is available online at http://petrochemicals.basf.com.

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 <u>www.basf.com</u>.

- 1) Find out more about BASF's biomass balance approach at: <u>https://www.basf.com/global/en/who-we-are/sustainability/we-drive-sustainable-solutions/circular-economy/mass-balance-approach/biomass-balance.html</u>
- 2) BASF's product carbon footprint (PCF) calculations comply with the requirements and guidance provided by ISO 14067:2018. A methodology review carried out by TÜV Rheinland Energy GmbH has certified that the PCF methodology SCOTT that was developed and is used by BASF SE for calculating the PCFs of BASF products complies with ISO 14067:2018 and reflects the state of the art. In addition, it is proven that the PCF calculations for the biomass balance products, which is used to decrease the PCF cradle-to-gate to zero or lower, is following the requirements of the respective ISO standards 14040 & 14044 (H. K. Jeswani, 2019. A methodology for integrating the biomass balance approach into life cycle assessment with an application in the chemicals sector. Science of the Total Environment 687, 380-391).