

News Release

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BASF now offering its high-performance UV acrylic hotmelt acResin® with a zero product carbon footprint

- **BASF achieves a cradle-to-gate product carbon footprint (PCF) of zero for acResin® by applying its biomass balance (BMB) approach and using renewable feedstock**
- **acResin® ZeroPCF and LowPCF products identical in performance to their conventional counterparts**
- **BASF certified by TÜV Rheinland Energy GmbH for its cradle-to-gate product carbon footprint**

Ludwigshafen, Germany – July 4, 2023 – BASF is now offering its UV acrylic hotmelt acResin® with a cradle-to-gate product carbon footprint (PCF)¹ of zero kg CO₂e/kg². The new products acResin® ZeroPCF A 260 UV, A 250 UV and A 204 UV are identical in quality and properties to their conventional counterparts. The carbon footprint of acResin® LowPCF UV 3532 has been reduced by more than 80%. The PCFs of BASF's BMB products are calculated according to the new "Together for Sustainability" (TfS) guideline and comply with ISO 14067:2018.² All of these products are manufactured at BASF's integrated production site in Ludwigshafen, Germany, and sold worldwide.

The outstanding sustainability profile of acResin® is made possible by the BMB approach. This was developed for complex production systems like those found at BASF. Instead of fossil feedstock (e.g., naphtha and natural gas), equivalent quantities of certified renewable feedstock are fed into the system at an early stage

of acResin[®] production. This has been confirmed by the independent REDcert² and ISCC PLUS certifications³. TÜV Rheinland Energy GmbH, an independent certification body, has confirmed the PCF calculations for acResin[®] ZeroPCF and acResin[®] LowPCF. “We have reviewed the PCF calculations for acResin[®] ZeroPCF and acResin[®] LowPCF and are pleased to confirm their plausibility,” says Susanne Jorre, Sustainability Expert at TÜV Rheinland Energy GmbH.

“We’re especially satisfied with this accomplishment because it helps the adhesives industry cut carbon emissions while retaining the outstanding performance of acResin[®],” explains Prof. Dr. Thomas Schiele, Vice President Adhesives, Fiberbonding & Paper Coating Chemicals EMEA at BASF. “Furthermore, by adding acResin[®] ZeroPCF to our portfolio, we have expanded our sustainable product range for a more circular economy.”

High performance and sustainable

acResin[®] has been designed for use in the manufacture of high-performance self-adhesive specialty labels and tapes for the automotive, construction, medical, cosmetics, food and beverage industries. These carbon-neutral solutions ideally combine high-performance properties and sustainability benefits. The use of renewable feedstocks has not changed the quality and performance of acResin[®] ZeroPCF and acResin[®] LowPCF when compared with those of their conventional counterparts. In addition, the UV-curable 100% acrylic hotmelt contains only minimal amounts of volatile organic compounds (VOCs) and is characterized by low odor and good skin compatibility. Moreover, the products in the acResin[®] portfolio have the following properties: high clarity for transparent films, outstanding resistance to aging and heat as well as resistance to water and chemicals. The products all comply with the strict requirements for adhesives with food contact.

The introduction of acResin[®] ZeroPCF and acResin[®] LowPCF represents a major step forward in the implementation of BASF’s sustainability strategy and its drive to develop more net zero products to meet its climate protection goals. These products make it possible to reduce CO₂ emissions in the relevant industries without compromising on quality.

Find out more about acResin® at <http://www.basf.com/acresin>.

Find out more about BASF's biomass balance approach at:

<https://www.basf.com/global/en/who-we-are/sustainability/we-drive-sustainable-solutions/circular-economy/mass-balance-approach/biomass-balance.html>

Find out more about the "Together for Sustainability" guideline at:

<https://www.basf.com/global/en/who-we-are/sustainability/whats-new/sustainability-news/2022/Chemical-industry-agrees-on-global-standard-for-calculating-product-carbon-footprint.html>

¹ 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).

² A product carbon footprint (PCF) of zero kg CO₂e/kg was calculated for acResin® ZeroPCF by cradle-to-gate assessment. The assessment took into account all product-related greenhouse gas emissions and the biogenic uptake of the renewable raw materials used in the value chain and attributed to the products via a certified mass balance approach. The calculations did not include packaging and other downstream value chain emissions such as emissions generated by transporting the products from factory gate to customer, emissions arising from further processing and end-of-life emissions (e.g., from waste treatment).

³ REDcert² and ISCC PLUS are standards developed for the use of sustainable biomass as raw materials in the chemical industry. The certification issued for BASF's biomass balance approach on the basis of these standards confirms that the biomass used is sustainable and has been fed into the production Verbund in the requisite amounts. It also certifies that the sustainable biomass is being used for the corresponding sales products. The certifications are awarded following on-site audits carried out by independent auditors.

BASF's Dispersions & Resins division

The Dispersions & Resins division of BASF develops, produces and markets a range of high-quality polymer dispersions, resins, additives and electronic materials worldwide. These raw materials are used in formulations for a number of industries, including coatings, construction, adhesives, printing and packaging, electronics and paper. With its comprehensive product portfolio and its extensive knowledge of the industry, the Dispersions & Resins division offers its customers innovative and sustainable solutions and helps them advance their formulations. For further information about the Dispersions & Resins division, please visit <http://www.dispersions-resins.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 www.basf.com.