

Lupranat ZERO - We create Polyurethanes for Sustainable Future

Climate change is the greatest challenge of our time, which is why we are aiming for net-zero CO₂ emissions by 2050. An important role on this path is played by the individual Product Carbon Footprint (PCF) of BASF products. They create the necessary transparency about the associated greenhouse gas emissions.

Our biggest step towards sustainability to date: the introduction of the first isocyanate without a CO₂ backpack.

BASF expands its portfolio of methylene diphenyl diisocyanate (MDI) and introduces with Lupranat® ZERO (Zero Emission, Renewable Origin) the first greenhouse gas neutral aromatic isocyanate. Lupranat ZERO has an accounting Cradle-to-Gate1 Product Carbon Footprint2 (PCF) of zero; this means that on its way until it leaves the BASF factory gate for the customer - all product-related greenhouse gas emissions and the biobased carbon bound in the product taken together - it does not carry a CO₂ backpack. Zero emissions up to the factory gate are achieved without offset certificates. Instead, renewable raw materials are used at the beginning of the chemical production chain and allocated via a mass balance process. In addition, renewable energies are used for the manufacturing process with green energy certificates (e.g. Renewable Energy Certificates).

Currently, Lupranat® ZERO is available for the product specification M 70 R, which is used for the production of MDI polyisocyanurate (PIR or polyiso) panels and rigid polyurethane foam for the thermal insulation of buildings. This is particularly interesting for the construction industry which the respective sector can benefit from it.

BASF has set itself the ambitious goal of reducing greenhouse gas emissions by 25 percent by 2030 compared to 2018 emissions. The individual PCFs of BASF products play an important role on this path, creating the necessary transparency about the associated greenhouse gas emissions.

Based on actual energy and raw material consumption from 2021, the PCF was also determined for MDI and is now available to customers. In addition, products are already part of BASF's portfolio for MDI that have been manufactured using renewable raw materials (Lupranat® BMB) or recycled raw materials (Lupranat® cCycled) and thus make a positive contribution to sustainability in the polyurethane value chain.



Contact

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BASF
We create chemistry

The certification of the PCF calculation by TÜV NORD was **successful in Spring 2022**. The raw material level certification by „REDCert2“ is available to our customers. This enables us to guarantee that **renewable raw materials have been fed into the Verbund production process**. This closes the link between the renewable raw materials used in Ludwigshafen and the mass-balanced products manufactured in Ludwigshafen and Antwerp. In this way customers and BASF can manufacture a wide **range of products in a more sustainable way**. Our production is based on green energy sources with proof of renewable energy origin. This supports our goal of **net zero CO₂ emissions by 2050**. In addition, we save fossil resources thereby replacing them with renewable resources.

We are currently working on offering further product variants from the Lupranat ZERO portfolio.

