Röhm expands its proTerra portfolio

Lower carbon footprint with proven high performance: Röhm launches PLEXIGLAS® proTerra molding compounds on the market

- Röhm offers customers two new ways to lower their product carbon footprint
- PLEXIGLAS® proTerra M5 contains mechanically recycled PMMA
- PLEXIGLAS® proTerra 8N made from ISCC PLUS-certified raw materials

With lowering greenhouse gas emissions the order of the day, Röhm has now expanded its proTerra product range to include PLEXIGLAS® proTerra molding compounds. They combine the proven performance of the polymethyl methacrylate (PMMA) PLEXIGLAS® brand with a lower carbon footprint. “All material manufacturers face the same requirements on the market: achieving a lower carbon footprint and higher recyclable content, all with no loss in performance. In response to this, we have developed our PLEXIGLAS® proTerra molding compounds,” says Sven Schröbel, Head of Sustainability Management at Röhm GmbH’s Molding Compounds business unit.

Röhm offers customers two different ways to lower their product carbon footprint: PLEXIGLAS® proTerra M5 contains mechanically recycled PMMA, while in PLEXIGLAS® proTerra 8N, fossil resources have been replaced with raw materials certified under ISCC PLUS (International Sustainability and Carbon Certification). “With these two options, we now offer PLEXIGLAS® molding compounds that help our customers to achieve their sustainability goals,” says Siamak Djafarian, Senior Vice President Molding Compounds at Röhm. “Sustainability is an integral component of our business strategy at Röhm.”

Promoting the circular economy

Röhm wants to eliminate all greenhouse gas emissions by 2050; in other words, the company wants its production to be climate-neutral. One way of achieving this goal is to use recycled resources. PLEXIGLAS® proTerra M5 is the latest example of how the company is advancing the use of mechanical recycling. In this new product type, up to 30% recycled PMMA from post-industrial sources is mixed with new PMMA in a controlled manner, lowering the material’s carbon footprint by 30% compared to a product made from completely new material. Although not completely identical to PLEXIGLAS® 8N due to the recycled material added, the product’s properties are largely comparable.

Using sustainably sourced raw materials

PLEXIGLAS® proTerra 8N, on the other hand, guarantees identical product properties to PLEXIGLAS® 8N and can therefore replace it entirely – with a 25% lower carbon footprint. To achieve this, fossil resources in PLEXIGLAS® proTerra 8N are proportionally replaced by ISCC PLUS-certified, sustainable raw materials and allocated via mass balancing. That means that the products are chemically identical and have congruent product properties, allowing PLEXIGLAS® 8N to be replaced by its green counterpart PLEXIGLAS® proTerra 8N in countless customer use cases without needing to undergo renewed release testing. PLEXIGLAS® proTerra 8N is already listed by the Automotive Manufacturers Equipment Compliance Agency (AMECA) as a material that complies with applicable standards and can therefore be used for optical lenses and reflex reflectors on vehicles.

In May 2023, Röhm received ISCC PLUS certification for all methyl methacrylate (MMA) and polymethyl methacrylate (PMMA) products at its largest production site in Worms, Germany.
With this certification, companies can demonstrate that the materials processed have been sourced sustainably. Further Röhm sites also plan to apply for certification.

PLEXIGLAS® is sustainable by design
PLEXIGLAS® proTerra molding compounds are suitable for countless applications, including in the automotive and lighting industry and household goods sector, where the material – like all PLEXIGLAS® molding compounds – enables sustainable design: The special plastic has the highest surface hardness of all thermoplastics and can therefore be used without a coating. Most importantly, however, end products made from PLEXIGLAS® guarantee unsurpassed UV and weather resistance. The high longevity of PLEXIGLAS® products contributes to the sparing use of resources.

proTerra brand for resource-friendly products
All Röhm products with a significantly reduced CO₂ footprint, that were made from sustainable raw materials, that make a significant contribution to promoting the circular economy and that save resources, such as raw materials, energy or water, qualify for the brand proTerra brand family.

...