

Press Release

Essen, October 20, 2020

Brenntag Polymers supports BLUE SAFETY in the development of an innovative bottle system for dental units

Brenntag (ISIN DE000A1DAHH0), the global market leader in chemical and ingredients distribution and a leading compound developer, has realised 'SAFE BOTTLE' in conjunction with the water experts at BLUE SAFETY. It is the first validated reprocessable pressure bottle system for dental chairs in a hygienic product design.

The innovative bottle system enables process water to be supplied to dental units with the purpose of ensuring a consistently high level of water hygiene. Even the problem of older dental units without a legally required system separation or safety device that protect the drinking water from contamination can be solved cost-efficient, resource-saving and compliant with regulations by retrofitting with SAFE BOTTLE.

The product launch is the result of intensive collaboration between Brenntag's polymer specialists, the injection-moulding professionals at FAUST and the water hygiene experts at BLUE SAFETY. "We had the idea for SAFE BOTTLE for a long time and were convinced of the product's enormous potential right from the beginning. In the development phase, however, the technical implementation was a challenge, because hygienic design was a clear focus during the conception. The interplay of product design, injection moulding process and material selection and development was crucial in order to be able to realize a component construction that is easy to clean", says Henner Vogel, quality management officer and SAFE BOTTLE product manager at BLUE SAFETY.

Unlike conventional systems, SAFE BOTTLE has easily accessible, easy-to-clean and easy-to-process geometries. It is extremely robust and designed to last. In order to meet the strict water hygiene regulations and prevent contamination, for example by microbial pathogens, the solution called for an intelligent product and tool design. Above all, high-grade materials and surfaces to which

microorganisms adhere only with great difficulty and that permit effective and sometimes aggressive cleaning agents and disinfectants are needed. "In addition, the materials had to meet our high standards for aesthetics, value and usability, and satisfy our desire for a sustainable solution. Together with the teams at Brenntag Polymers and FAUST, we were able to optimally realise these specifications", says Vogel.

The dental vessel's components include the TROGAMID® CX7323 microcrystalline polyamide from Evonik. This high-performance polymers with FDA and EFSA approval is characterised in particular by high mechanical reliability and resistance to chemicals as well as high transparency and scratch resistance. It is perfect for use with food products. TROGAMID® CX has been established in medical technology, optics and cosmetics for years now too.

On top of the above, there were additional usage-specific material parameters required for various components of the SAFEBOTTLE, such as compatibility with laser markings. Thanks to Brenntag's compounding expertise and network of expert partners, these components could be individually developed and produced. "This project is an excellent reflection of our work", explains Martin Reers, external account manager for polymers at Brenntag, adding, "We centre the individual needs of the users. The constructive collaboration with our project partner BLUE SAFETY, with a combination of distribution products and compounding solutions producing optimal results, is confirmation of our strategy."

Brenntag Polymers employs a user-oriented approach to develop thermoplastic materials that provide significant benefits over metal when it comes to hygiene, safety, and economic and technological considerations. Thanks to its deep knowledge of thermoplastics, Brenntag Polymers can offer targeted solutions such as drinking water and food-grade products for various industries.

About BLUE SAFETY:

BLUE SAFETY has been dedicated to the development of (water) hygiene concepts for ten years and specialises in the dental industry. The water hygiene

and medical-technology company is a medical-product manufacturer with a DIN EN ISO 13485 certification, now serving over 1,000 practices in Germany and Austria. The water experts research, develop and produce from Münster (Westphalia). In-house plumbers implement and oversee the concepts at the customers' site. The differentiated expertise of its staff and its partnerships with hygiene institutions make BLUE SAFETY an absolute specialist in the area of water hygiene.

About FAUST:

FAUST has been delivering tailored solutions for plastics injection moulding for over 60 years. The company from Glandorf (Osnabrück) presides over an extensive spectrum of services for the production of injection-moulding parts and components, from development and design through to internal toolmaking and various refinement processes. It has consistently shown itself to be a competent, reliable partner of Brenntag Polymers.

About Brenntag Polymers:

Brenntag Polymers develops, produces and markets compounds in engineering thermoplastics and high-performance polymers and is a product development partner for customer-specific material solutions. In addition to our distribution offering that features other leading manufacturers and brands, our customers have access to around 700 products from our in-house development work. Our expertise extends from product development to consulting and market-readiness. Working in close cooperation with our customers, we create individual materials that are precisely tailored to their future usage. We possess specialised know-how of metal substitution, thermally conductive compounds, drinking water and food-compatible compounds, detectable and tribologically optimised compounds. Our materials can be adjusted individually and have demonstrated their benefits for many applications in a wide range of industries, such as healthcare, mobility, electronics and energy, building and construction, industrial engineering, appliances and sport and leisure.

Further information: www.brenntag.de, www.bluesafety.com, www.faust-kunststoff.de, www.evonik.de.

Brenntag Polymers contact:

Martin Reers
Account Manager (External)
Polymers, DACH Region
Brenntag GmbH
Ramstein site
Carl-Zeiss-Strasse 2a – 4
66877 Ramstein-Miesenbach
Germany
Mobile: +49 172 26 08 220
Email: martin.reers@brenntag.de

Press contact:

Hubertus Spethmann
Brenntag AG
Global Communications
Messeallee 11
45131 Essen
Germany
Phone: +49 201 6496-1732
Email: hubertus.spethmann@brenntag.de
www.brenntag.com