

News Release

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For smart agriculture: durable milk meter sensors made of Ultrason[®]

- **Polyphenylsulfone Ultrason[®] P 3010 shows high toughness and chemical resistance for continuous use in farm environment**
- **Milk meter sensors by milkrite | InterPuls contribute to reliable and accurate milk quality control**

The world-leading dairy equipment company milkrite | InterPuls, Methuen Park, United Kingdom is now using Ultrason[®] P 3010 to manufacture housings of milk meter sensors used for checking the milking results of cows, sheep and goats. The BASF polyphenylsulfone (PPSU) contributes to the durability of the sensor because of its high toughness and chemical resistance: Thus the milk meters can withstand the rough farm environment as well as the repeated cleaning of the milk meters. The transparent Ultrason[®] grade supports easy visual checking of the milk flowing through the metering device and in the long run does not show any discoloration. It also meets milkrite | InterPuls's strict requirements regarding food contact approval.

Milk meter sensors are used to control the volume and quality of the milk still within the milking process. The milk can be weighed and its conductivity can be measured. milkrite | InterPuls selected Ultrason[®] P because farmers can easily see through the transparent material to check the milk's appearance. Dairy components made of Ultrason[®] P can withstand kicks by cows, farm dung and then be easily cleaned by many different cleaning agents retaining both transparency and high mechanical

strength, also demonstrating a high resistance to stress cracking. "We appreciate the characteristics of BASF's Ultrason® in this important component of dairy technology", says Stefano Ferri, Global R&D Program and Intellectual Property Manager at milkrite | InterPuls. "It contributes to the excellent performance of our milk meters like iMilk600, iMilkNano and ACRsmart MMV which are the heart of the demanding milking process and contribute to a reliable and accurate milk quality control. The sensor housing is a complex technical part exposed to high stress in a challenging environment with superior demands on its continuous-use properties."

The medium-viscosity grade Ultrason® P 3010 also enables a compact and smooth design of the milk meter, ensuring a stable vacuum and foam-free performance. "For other demanding components in dairy technology, like manifolds and buffers, BASF offers further optimized polyarylethersulfones", says Georg Graessel from Global Business Development Ultrason® at BASF. "The grades Ultrason® P 2010, E 2010 and E 3010 meet different demands on toughness and superior chemical performance like resistance against superheated steam needed for repeated cleaning." When the milk is further processed, all these Ultrason® grades can also be used for the production equipment of dairy foods like cheeses, yogurts and curd. These foods contain a high level of butterfat usually causing stress cracking in other materials. Made of Ultrason® these components show a high wearability and durability.

Ultrason® is the trade name for BASF's product range of polyethersulfone (Ultrason® E), polysulfone (Ultrason® S) and polyphenylsulfone (Ultrason® P). The high-performance thermoplastic is used to manufacture water filtration membranes, stylish, durable and safe household and catering applications as well as lightweight components for the automotive and aerospace industries. Ultrason® brands can substitute thermosets, metals and ceramics in many applications because of their extraordinary property profile.

For more information: www.ultrason.basf.com

About milkrite | InterPuls

Milkrite | InterPuls is a global leader providing complete milking point solutions to dairy farmers across the world with the aim of improving every farm it touches. Milkrite | InterPuls has over 100 years of manufacturing experience in the dairy industry. Our products that we manufacture include over 150

different types of dairy inflations to fit most brands and types of shells, as well as tubing, claws, filters and a variety of other products for the dairy parlor. More information: www.milkrite-interpuls.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.