

News Release

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CESIO 2019: BASF addresses customers' needs with sustainable solutions and digital applications

- **BASF presents sustainable surfactant solutions for the home care and I&I industry as well as for technical applications**
- **Curiosity, Rediso™ and mixed reality: BASF is using digital solutions to add value for customers**
- **BASF experts provide insights into innovative solutions and the latest trends in surfactants**

Munich, Germany – June 3, 2019 – At this year's CESIO World Surfactant Congress taking place in Munich from June 3 to 5, BASF (booth 4) will be focusing on resource-friendly solutions and digital applications. "Sustainability and digitalization are key drivers for our customers and for BASF," said Soeren Hildebrandt, Senior Vice President, Home Care, I&I and Industrial Formulators Europe at BASF. "Our aim as a reliable partner is to support our customers in responding to these trends. We do that by investing in our production plants and capacities and by continuously exploring new uses for digital applications."

Environment and skin friendly laundry products

The increasing importance of eco-friendly, needs-based solutions is reflected in BASF's broad portfolio for the home care and industrial and institutional cleaning industry. **Glucopon® 650 EC**, a wholly bio-based surfactant, is ideal for liquid

detergents for children's and baby clothing and people with allergies. In addition to being gentle on sensitive skin and dermatologically tested, it is effective at washing temperatures of as low as 20°C. BASF also creates more transparency for its customers by helping to shape industrial standards such as the new EN 17035 standard for bio-based and biodegradable products.

Unspoiled outdoor pursuits with the right detergent solution

Whether your pleasure is mountain biking on muddy trails or playing tennis on clay, BASF solutions mean you won't have to worry about mud splashes, grass stains or red socks from tennis court dust. **Sokalan® HP 96** in detergents helps remove stains while preventing dirty water from soaking back into clean fabrics during the wash cycle.

Sustainable and efficient: surfactant portfolio for industrial formulations

Customers in all sorts of industries – be it leather, paper, textiles, or coatings – are interested in solutions with the lowest possible negative ecological impact in the supply chain. They want products that are based on renewables, consume less resources or have positive toxicological and ecotoxicological properties. With its wide surfactant portfolio for technical applications, BASF is ideally placed to support customers in responding to these market trends.

A very special field for surfactants is their use as emulsifiers in polymerization processes. BASF's **Disponil® APG** is an environmentally sound and health-friendly alternative to conventional surfactants. It is fully based on renewable feedstock and releases no formaldehydes when used as an emulsifier in polymerization processes. It has additional potential in agrochemical formulations as an adjuvant in suspension concentrates and micro emulsions for crop protection. With **Disponil® NRG** in its portfolio, BASF also meets the need for resource-efficient solutions. Due to its non-gel forming properties, the newly developed surfactant reduces the amount of energy needed to manufacture product formulations, hence lowering the consumption of resources.

As well as delivering eco-friendly solutions, BASF also meets the high demand for products with a favorable health and safety profile. **Plurafac®** and **Dehypon®** cause

no eye or skin irritation due to their improved toxicological characteristics. They are ideal for use as wetting or low-foaming agents and emulsifiers in chemical formulations, for example in the coatings, leather, textile and paper industry. BASF's label-free **Pluronic® PE** product line is designed specifically for crop protection products. Key benefit: it is toxicologically safe and does not have to be labeled. The non-ionic surfactant is designed as a dispersant or emulsifier with an enhanced stabilizing effect in emulsions.

Digitalization adds value for customers

By utilizing digital technologies and data, BASF creates more agile research and development processes and offers customers enhanced cooperation and higher transparency for their decisions. The company's expertise along with the superior computing power of the **Quriosity Supercomputer** enables BASF to model formulations and explain on a molecular level how existing and new BASF products work. Based on the example **Sokalan® HP 20** BASF shows at its booth how simulations help to identify correlations in formulations, drive innovative solutions and accelerate time to market.

To explore new business opportunities and stay competitive, the home care and I&I industry needs fast answers, individual solutions and access to profound knowledge. BASF will be using the congress to present the new digital assistant, **Rediso™**. The platform delivers access to overarching Home Care and I&I industry themes while providing round-the-clock virtual support, answering questions and proposing solutions. BASF is offering limited free trials for trade fair visitors: www.rediso.org.

Digital applications including augmented and **mixed reality** are helping BASF to make maintenance and production processes more efficient. Interactive 3D projections of objects such as system parts and plant components provide location-independent access to key information, facilitating better decision-making and optimizing knowledge transfer. Demos at the BASF booth with mixed reality headsets will show how the technology is being used at BASF even now.

BASF presentations: insights into innovative solutions and the latest trends

BASF experts will be hosting a plenary session as well as several presentations with insights into the latest surfactant formulations, the role of sustainable concepts and Rediso™, the digital assistant.

Monday, June 3rd: Plenary Session		
Time	BASF expert	Topic
2:00 pm	Thomas Greindl	Innovation and sustainability in surfactants

Tuesday, June 4th			
Time	BASF expert	Topic	Category
9:00 – 9:30 am	Frederic Bauer	Alkylpolyglycosides - a surfactant class of high variability	Technical & Applications – Bio-based Surfactants
10:00 – 10:25 am	Kerstin Kieser	Renewable based surfactants	Business & Market Trends
12:00 – 12:25 pm	Juergen Tropsch	The journey to a standard for bio-based surfactants in Europe	Safety & Regulatory Affairs
12:30 – 12:55 pm	Heike Weber	Excellent automatic dishwash results – combinations of strong chelating agents and carry over surfactants	Technical & Applications – Detergency & Cleaning
2:30 – 2:55 pm	Claudia Brunn	Fatty acid sulfonate – redesigning a surfactant for the future	Technical & Applications – Innovations for Personal Care
3:30 – 4:00 pm	Andreas Willing	CESIO's recommendation of C&L surfactants	Safety & Regulatory Affairs

Wednesday, June 5th			
Time	BASF expert	Topic	Category
9:30 – 9:55 am	Sven Biermann	Presenting a virtual industry assistant for the home care and I&I industry	Business & Market Trends

10:00 – 10:25 am	Sonja Fischer	Laundry loves perfect whiteness! Discover our new solutions!	Business & Market Trends
10:00 – 10:25 am	Christian H. Weidl	New generation of nonionic non- gelling Surfactants	Technical & Applications – Surfactants Applications
10:30 – 10:55 am	Christian Bittner	Surfactant parameter of alkyl ether sulfates for prediction of microemulsions	Technical & Applications – Science & Surfactants

More information on BASF's [CESIO webpage](#).

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About the Care Chemicals division at BASF

The BASF division Care Chemicals offers a broad range of ingredients for personal care, home care, industrial & institutional cleaning, and technical applications. We are a leading global supplier for the cosmetics industry as well as the detergent and cleaner industry, and support our customers with innovative and sustainable products, solutions and concepts. The division's high-performance product portfolio includes surfactants, emulsifiers, polymers, emollients, chelating agents, cosmetic active ingredients and UV filters. We have production and development sites in all regions and are expanding our presence in emerging markets. Further information is available online at www.care-chemicals.basf.com.

About BASF

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. The approximately 122,000 employees in the BASF Group work on contributing to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is organized into six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of around €63 billion in 2018. BASF shares are traded on the stock exchange in Frankfurt (BAS) and as American Depositary Receipts (BASFY) in the U.S. Further information at www.basf.com.