

All you need for superior aqueous coating systems

- Crosslinkers and adhesion promoters for high-quality coatings
- Polyurethane dispersions for high-performance glass fiber sizing

Cologne – At this year's European Coatings Show, which takes place in Nuremberg from March 19 to 21, LANXESS will present its comprehensive product portfolio for the coatings industry. One focus will be on innovative raw materials for formulating aqueous systems for a wide range of applications, from glass fiber sizing and plastic coating to textile finishing or vehicle painting.

Waterborne systems from LANXESS allow customers in the coatings industry to comply with increasingly demanding regulations, e.g. on volatile organic compounds (VOC), but also to develop high performance products fulfilling modern application needs.

Boost your system by crosslinking it with Trixene Aqua

The exceptional Trixene Aqua range of water-based blocked isocyanate dispersions from LANXESS are excellent crosslinkers and adhesion promoters for aqueous coatings systems. They boost the chemical and mechanical resistance of coatings and sizing formulations to allow much better performance and durability in the final application. Due to the blocked isocyanate group they are more stable than the respective free counterparts and can easily be formulated in 1-K and 2-K systems together with a variety of complementary aqueous resins, e.g. hydroxy-functional acrylics, polyesters and urethanes.

This is beneficial for instance in textile processing where Trixene Aqua BI 220 can be used as an adhesion promoter for waterrepellent finishes on sports and fashion clothing, delivering superior

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durability. Likewise, Trixene Aqua BI 201 can be used as a crosslinker for automotive clear coats, giving rise to improved chipping resistance and optical appearance.

Witcobond and Trixene Aqua: a strong combination for waterbased, high performance PU coating systems

Next to Trixene Aqua, LANXESS offers a full portfolio of water-based Witcobond polyurethane dispersions (PUDs). Especially for glass fiber sizing, LANXESS has developed high solids grades that offer superior bonding of filaments in fiber and composite processing, and outstanding physical properties in the end application. For example, Witcobond 374-13, a polyester-based polyurethane dispersion, confers excellent integrity for chopped strand production and good adhesion to various thermoplastic and thermosetting matrices. In combination with LANXESS's latest development of Trixene Aqua BI 202 the system enhances the bonding between glass strand and various resin matrices used in advanced composites.

Witcobond products can be employed in a broad range of other applications, for waterborne coatings and finishes for hard and flexible substrates. They embrace anionic, cationic and nonionic chemistry, so binders covering the full pH range are available. The extensive list includes high-solids content products with up to 60 percent solids, dispersions with low or no co-solvent content, including products free of N-methyl pyrrolidone (NMP), and grades free of nonionic surfactants such as alkylphenol ethoxylates (APEOs) or more specifically, nonylphenol ethoxylates (NPEOs).

Further information on the products of LANXESS's Urethane Systems can be found at <u>http://ure.lanxess.com</u>.

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LANXESS is a leading specialty chemicals company with sales of EUR 9.7 billion in 2017. The company currently has about 15,500 employees in 33 countries and is represented at 59 production sites worldwide. The core business of LANXESS is the development, manufacturing and marketing of chemical intermediates, additives, specialty chemicals and plastics. LANXESS is listed in the leading sustainability indices Dow Jones Sustainability Index (DJSI World and Europe) and FTSE4Good.

| Cologne, | March 13, 2019 |
|----------|----------------|
| sdt/kaw | (2019-00013e) |

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You can find further information concerning LANXESS chemistry in our WebMagazine at <u>http://webmagazine.lanxess.com</u>.

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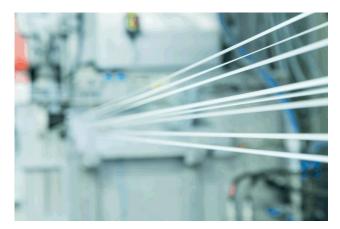
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Image



Especially for glass fiber sizing, specialty chemicals company LANXESS has developed high solids PUD (polyurethane dispersions) grades that offer superior bonding of filaments in fiber and composite processing, and outstanding physical properties in the end application. Photo: LANXESS AG

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