BOOSTING INKJET PRINT RESULTS

AERODISP® PRODUCT RANGE

Waterborne particle dispersions for inkjet receptive coatings to enhance dot sharpness, resolution and ink fixation

Why are inkjet receptive coating being used?

Inkjet receptive coatings – often also called inkjet primers – are commonly used in industrial inkjet printing processes. In order to achieve the best possible print results, a thin coating is being applied to the substrate

- which ensures a homogeneous surface structure
- which is easy to wet and to adhere to
- and allows for best possible inkjet print results

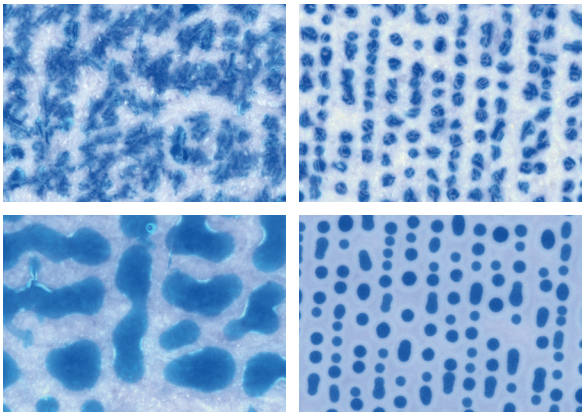
Often these inkjet receptive coatings are waterborne, the polymer contained depends on the substrate and the final properties to be achieved.

Optimizing print results

Excellent dot sharpness and high resolution are key elements supporting the transition from analog to digital printing, especially for waterborne inkjet inks. To achieve high-quality results, controlling the spreading behavior and fixation of the inks on the substrate is crucial.

With the new range of waterborne AERODISP® dispersions, Evonik´s Coating Additives Business Line has designed products to ensure high dot sharpness and fixation of ink droplets on the ink receptive coating, also known as inkjet primer. The AERODISP® dispersions can be incorporated by simple stirring and are compatible with many different binders and formulations.

Catering to the needs of different applications, two of these new AERODISP® dispersions have an anionic nature, and two have a cationic nature. This allows for optimal interactions and fixation of the ink on the primer.



AERODISP® for inkjet receptive coatings

- AERODISP® WR 8520
  anionic, SiO_2-based
- AERODISP® W 7520 NF
  anionic, SiO_2-based,
  excellent food contact status
- AERODISP® WK 7330
  cationic, SiO_2-based
- AERODISP® W 630
  cationic, Al_2O_3-based, high transparency

Click or scan the QR-code for more information!

EVONIK
Leading Beyond Chemistry

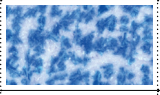
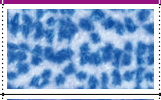
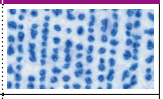
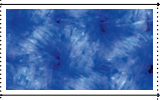
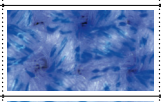
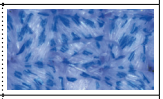
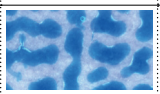
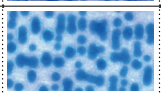
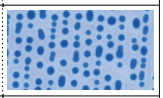
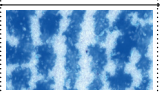
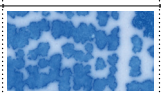
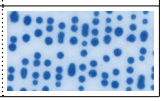
2025-09

The anionic grades are especially recommended for food packaging and decorative printing, being compatible with nonionic and anionic binder systems. The cationic grades are compatible with nonionic and cationic binder systems, making them the first choice for, as one example, primers for textile inks.

Application testing

In our Evonik Coating Additives laboratories we have done extensive testing with different formulations based on different binders. These were applied on different substrates and then printed by waterborne inkjet inks and the resulting dot formation spreading and sharpness evaluated.

Excellent improvements could be observed in different binders and on all substrates at dosages >20% dispersion on total formula weight.

Material	Blank	Primer Reference	Primer with AERODISP®
Paper			
Textile			
BOPP			
PVC			

Inkjet print on substrate coated with ink receptive coating, polymer = Polyvinyl alcohol

JetXpert print station in CAD laboratories

Key Benefits

- Full range of AERODISP® waterborne dispersions to cover different needs
- Significantly increased dot sharpness and achievable resolution of inkjet prints
- Easy incorporation and excellent compatibility with various waterborne binders
- Ionic nature allows for fixation of the ink

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More information and test results ...

in the category „Product Launches" on **www.coatino.com/campus**

Any questions?

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