

A decorative graphic consisting of a thick, rounded L-shaped line. The top horizontal part is green, and the vertical part is orange.

BIOCIDE-FREE TINTING PASTES

Waterfree Colorants

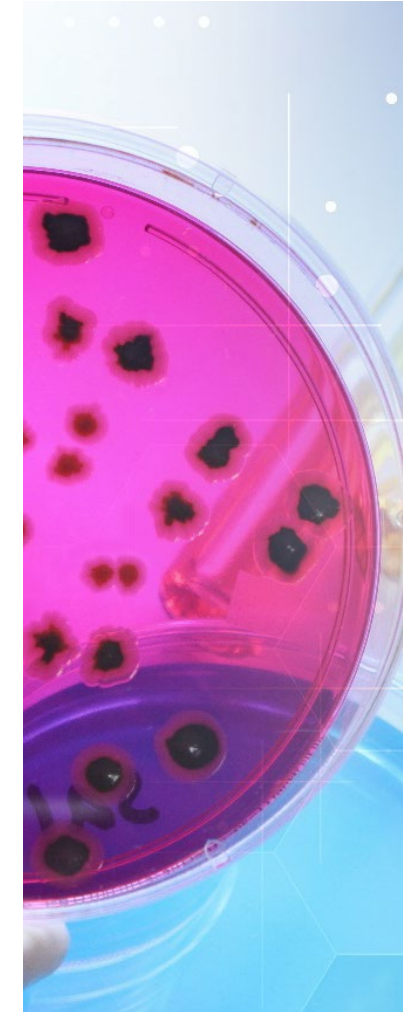


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Why biocide- & water-free tinting pastes?

- Colorants for biocide-free paints
- Microbial contaminations cause high costs and workload
- Decrease of PT6-authorized in-can-preserved
- Risks of effectiveness gaps of biocide packages
- Continuous increase of hazard classifications for biocides
- Water content and raw materials as food base allow for microbial attack



Existing technical approaches

Increased pH-Value

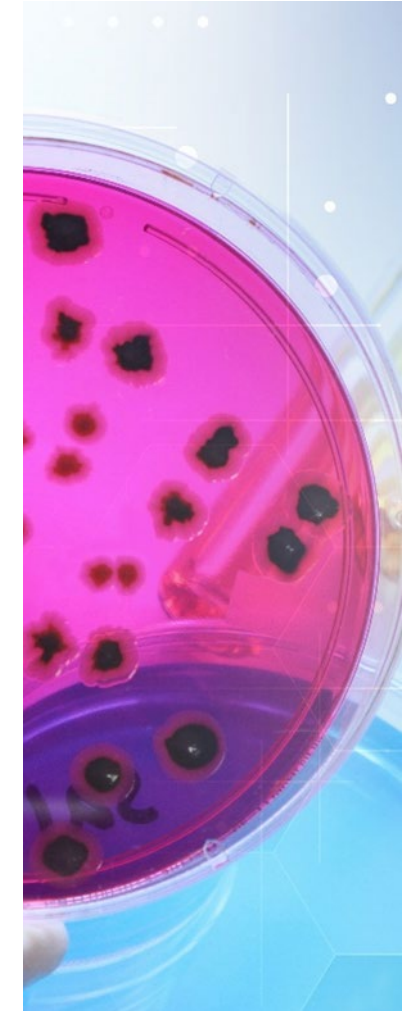
- Labelling for $\text{pH} \geq 11.5$
- No guarantee for contamination-free colorants

Use biocides in production only

- Problem: no protection in opened packages and in tinting machines

Stir-In-Pigments

- Expensive and not sustainable due to high energy consumption for production
- Low compatibility in various basecoat systems
- Special tinting machines are required



Our solution: water-free pigment pastes

Replacing water with substitutes deprives microbes of habitat

Advantages

- No need for biocides
- No drying and thickening due to water evaporation
- Theoretically applicable in water-based, solvent-based systems

Production, storage and dosing do not require new technology

- Low investment costs for paste- and paint-manufacturers
- Compatibility with existing waterborne paints & coatings
- No new development of base systems



Waterfree colorants: application advantages

- Universal deco tinting pastes for IPT- and POS-tinting
- Broad compatibility with existing basecoats
- Stability against biocidal contamination in dispensers
- No thickening or drying caused by water evaporation
- Lower costs of maintenance for dispensers in market



Sustainability from waterfree colorants

Sustainability

- Biocide-free colorants
- Paints without allergy potential (EUH208, H317)
- Lower energy consumption vs. stir-in-pigments ⇒ sustainable production
- Less waste and costs from contaminated products

Regulatory

- No biocide ⇒ no labelling required
- Conformity with Eco-label, Nordic Swan, Blue Angel
- No future regulatory limitations expected

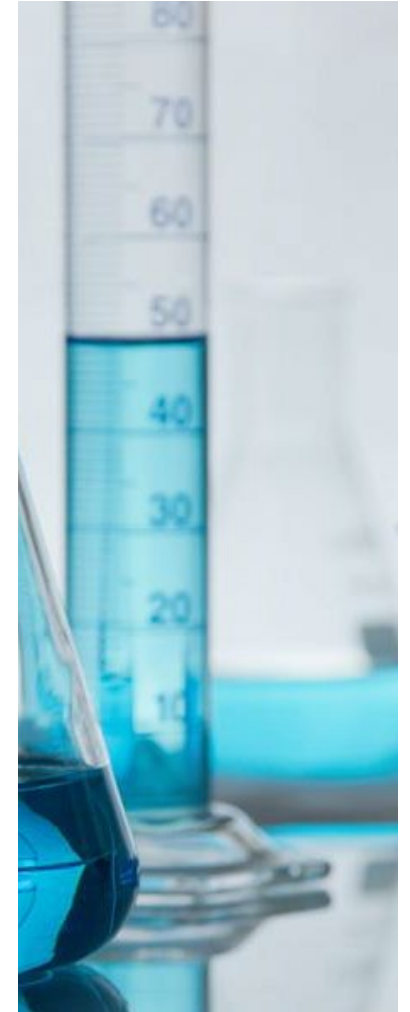


Current status of development

- Elaboration of 11 different formulations for IPT- & POS-tinting
 - 6 pigment pastes ready for test market
 - Focus on a broad range of architectural applications

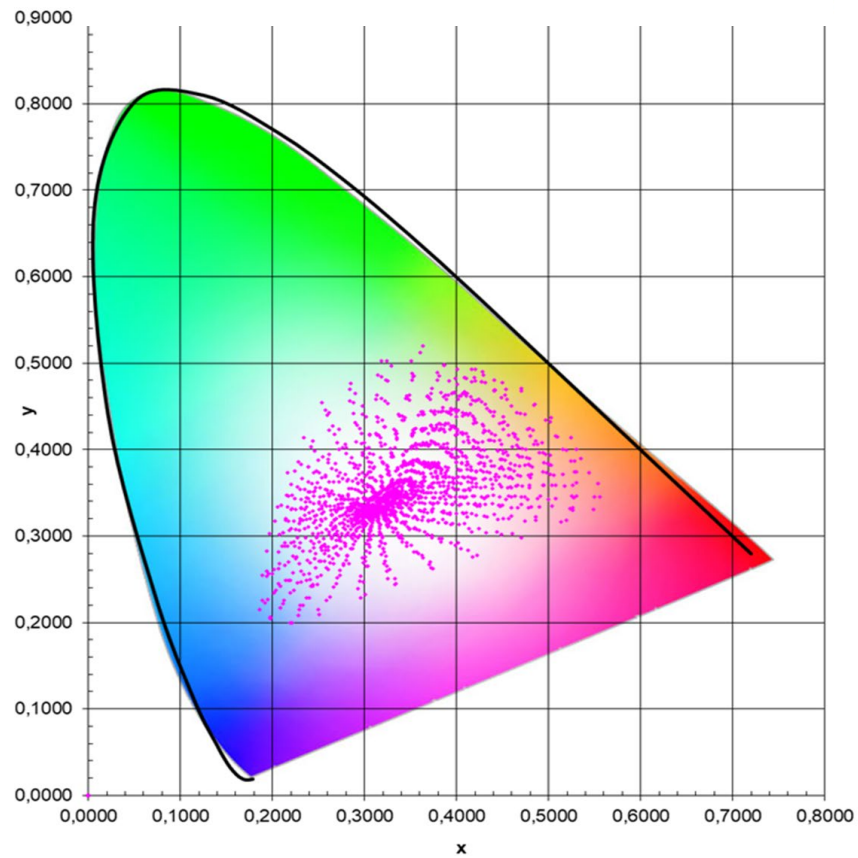
- Current application is limited to indoor wall paints or applications with low pigment concentrations.

- New developments with reduced hydrophilicity are ongoing.



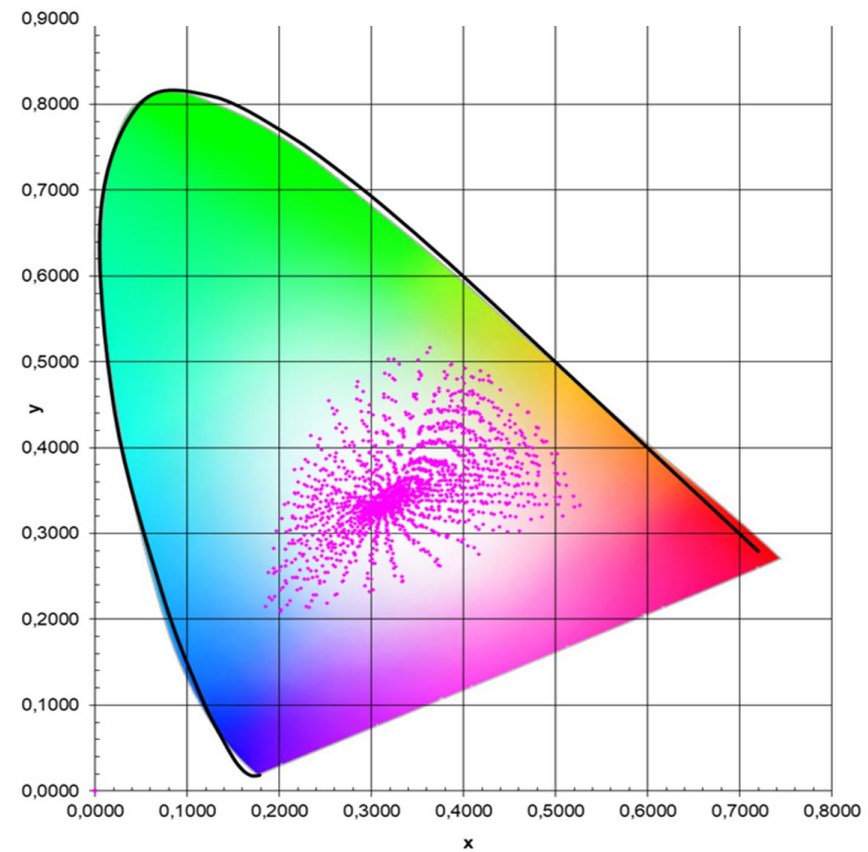
Color space coverage

Complete Fan-Deck*



* NCS S / RAL-HR

Coverage with 11 WF-Pastes



**THANK YOU VERY MUCH FOR
YOUR ATTENTION!**

Do you have any questions or want
to dive deeper into a topic?

Contact Heubach's Preparations Team!

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