# Sustainability success Synres case



## Corbion co-creates with customers to reduce the environmental impact of coatings

Helping our customers solve the big challenges of their customers (the consumer) - is at the center of everything we do. At Corbion, we co-create with experts in pharmaceutical, biomedical, agrochemical, cosmetics and household applications. We believe this kind of co-creation is what will help us tackle today's challenges in ways that consider our collective future and deliver lasting value. The solutions that offer the greatest value come to fruition when key players from different disciplines come together, share ideas, learnings and insights.

Together with Synres, the supplier of choice for some of the world's leading coating producers, we developed modified recipes for alkyd resins with a 50% lower carbon footprint.

#### Market drivers for lowering the impact of coatings on the environment

Through the centuries, the coating industry made a lot of improvements in decreasing the impact of their products on the environment. Developments like powder coatings, water borne coatings and high solid coatings helped to lower their environmental impact. In the past years, climate change is gaining increased attention. All major nations that signed onto the Paris Agreement are developing policies to deliver GHG reduction targets. Reducing the carbon footprint of coatings can contribute to the achievement of such targets.

#### Case study

Urakyd AD44 Q-70 is the "work horse" of Synres decorative resin portfolio, having many applications, including wood stains, TRIM paints (window frames, doors, interior & exterior) and wood impregnations. Developing a drop in for this resin with a reduced carbon footprint can have a big impact due to volume.

### Approach

- Replace part of the fossil-based raw materials in the AD44 Q-70 resin by PURALACT® B3 from Corbion
- Guarantee local (EMEA, preferably Europe) sourcing of raw materials
- Implemented tweaks to obtain equal hydrolytic stability to reference product

#### Result

- Urakyd ECO product range potentially reduces the Carbon footprint of alkyd resins by 50%.
- Properties of Urakyd ECO products are close to the reference products
- By developing the Urakyd ECO range of products, we offer our customers a tool to lower their impact on the environment and improve the acceptance of coatings to the public and governmental bodies.



Figure 1 - Cradle to Gate Carbon Foot Print Urakyd ECO versus reference product. Use phase and end-of-life are similar for both products.

