

## Factsheet

*This factsheet accompanies Press Release published June 28, 2018:*

*Chr. Hansen Natural Colors upgrades main R&D facility and Global Expertise Center*

### **What does Chr. Hansen's R&D department do?**

The R&D team works to develop new solutions that can answer the needs of our customers. The team does this by evaluating new supplies of raw materials and experimenting with formulation techniques. R&D also works on the Processes, including extraction and production, and new technologies related to natural colors in general as well.

### **What is the profile and skill set of an R&D employee?**

Our employees are fully engaged to deliver new natural color or coloring food stuffs solutions to the market. The team is experienced and focuses on combining final application needs to new product development, focusing as well on cost-in-use to secure conversion from artificial colors. We have specialists from pigment chemistry, process engineering, agronomy, formulation and application and our employees are typically PhD, Engineers and Technicians. Many of our colleagues are quite specialized, having worked within a specific industry of Food & Beverage for many years, with many starting their careers at a food manufacturer.

### **How many new employees does Chr. Hansen expect to have in Montpellier after the expansion?**

Today, the Montpellier site has 40 employees. This is expected to grow to 50 by the time the expansion and upgrade of the facilities is completed in November 2019.

### **What are the trends in the market that Chr. Hansen is supporting through its R&D work?**

We are supporting two trends:

1. First wave of conversion: Conversion away from synthetics. Here the challenge is to develop shades from natural pigment /formulation having the same shade /brilliance than artificial dyes, delivering a strong stability in application as well as competitive Cost in Use.
2. Second wave of conversion: Conversion to coloring foods. Coloring foods is a well-established movement driven mainly by consumers to buy food that is produced with simple, minimally processed ingredients. This is typically a second wave of conversion within a brands life cycle. Coloring foods meets this requirement for most consumers. We work with the level of 'naturalness' on many fronts; this is a complex world because various demographic and cultural groups focus on different things when they want more natural ingredients.

**Is this Chr. Hansen Natural Color's only Global Expertise Center?**

Chr. Hansen Natural Colors has other Global Expertise Centers (GECs) around the world – notably in Nienburg, Germany and Milwaukee, USA. The site in Montpellier is also home to Chr. Hansen's Natural Color R&D center which enables application and R&D to work closely together, securing that new products are designed according to a specific application.

The GEC in Montpellier specializes in dairy and beverage. For beverages the challenge is to create colors that are stable at low pH, very often used in products with transparent packaging and in some regions stored at quite high temperature. On top of this we need to secure that colors are stable with the flavor compounds and do not create ringing or stains on the packaging. In order to answer these demands Chr. Hansen just launched our new CapColors, for example for yellow/orange shades, based on our encapsulation/emulsion technologies.

Within Dairy and Fruit preparation, the trend is more focusing on clean labelling in order to bring appealing shades during the fruit prep/yoghurt shelf life: we have a strong focus on coloring food. A new trend is also the non-dairy application.