

IN VOGUE

PRODUCT STORY, APRIL, 2019



Juices, smoothies, and even coconut water are now riding the high in popularity. Health-conscious consumers and sport enthusiasts alike are banking on their beneficial effects. To keep these drinks fresh for longer, producers rely on an eco-friendly product from Evonik Active Oxygens.

Evonik Resource Efficiency GmbH Rellinghauser Straße 1–11

45128 Essen
Germany

Contact Nina-Marlen Orth Phone +49 6181 59-4430 nina-marlen.orth@evonik.com



Trendy new drinks targeting larger groups of consumers are flooding the market. These drinks are mainly based on natural or untreated products. Nutritional awareness drives consumers towards healthier options that are good for their bodies. Smoothies and juices have the added advantage of being a convenient way to achieve one of your '5 a Day'. This time saving is also reflected in the popularity of ready-to-go products in light and handy PET bottles and drinks cartons.

Consumers are happy to pay for these feel-good products. Many smoothies are advertised as being loaded with healthy ingredients like fruits, vegetables, protein and even added fibre. Over the last few years coconut water has also grown in popularity. These drinks are also more attractive to the health conscious consumer if they contain no artificial additives. The demand for the most fresh and natural ingredients is supported by an Evonik product that keeps trendy carton drinks fresh for longer, without the need for refrigeration and without no loss of flavor or essential vitamins.

MILD DISINFECTION

A visit to a filling plant in the Westerwald (Germany) demonstrated how the Evonik product is used. At 6.00 a.m. production is already in full swing. In one building of this family-owned enterprise the Tetra Pak filling plant goes about its business with the same constant rhythm with freshly filled drinks cartons leaving the machine at half-second intervals, stamped with the filling time and "best before" date.

The secret of extended freshness is contained in the upper part of the filling plant, where the still empty cartons are immersed in a bath filled with hydrogen peroxide solution. This ensures the packaging remains germ free before filling as the presence of germs would cause the product to deteriorate sooner. Prior to the carton being filled, the excess hydrogen peroxide is removed by means of rubber rollers and hot-air fans. "This particular form of filling can significantly increase the shelf life," says a plant employee.

This application is called aseptic packaging and is particularly useful for sensitive drinks with high hygiene requirements, such as milk products and juices. This Evonik product that keeps germs at bay is called OXTERIL®. To health-conscious buyers this might seem paradoxical: Hydrogen peroxide, after all is a chemical. Dr. Sebastian Imm, responsible for Applied Technology for hydrogen peroxide at Evonik, explains: The aqueous solution of hydrogen peroxide that Evonik has developed for aseptic packaging is known as OXTERIL®. These grades are very pure, and with the action of heat decompose to just water and oxygen. This highly eco-friendly disinfectant, therefore, is ideally suited for use in the food industry." In this respect, the high-purity OXTERIL® product is an excellent match for trendy beverages valued for their naturalness. The only decomposition product, apart from gaseous oxygen, is water making it safe to the environment and the consumer. Not least for this reason, hydrogen peroxide has established itself in the beverage industry as a thoroughly purifying yet mild product.





Very close: Evonik is in constant dialog with the users of OXTERIL* – in this way not only the technical development of the product but also market trends are considered

A LONGER SHELF LIFE EVEN WITHOUT REFRIGERATION

The filling of drinks in cartons disinfected with hydrogen peroxide has another major advantage. The products have a longer shelf life even without refrigeration and the need for additional preservatives. These recyclable cartons are available in a variety of designs so that the individual character of the drinks can be. And, not least, the handy cartons are practical: "Gable-topped drinks cartons are currently very much in demand because they make pouring easier," says the plant employee, who is aware of consumers' preferences. The filling plant has used this design for its wide range of fruit juices and has found it very satisfactory.

Evonik products are paving the way for food safety and thus for the beverage industry. Increased demand for healthy and trendy drinks is supported by mild disinfection of the packaging material. The result: fewer damaged goods and unimpaired flavor coupled with a longer shelf life.