

Achieving more performance with less material input

Enzymes for more sustainability

The use of high-performance enzymes in laundry and home care products reduces the amount of resources and raw materials used. Henkel Research has succeeded in combining surfactants and – for the first time – enzymes within a liquid hand-dishwashing product so that starch remains can be quickly removed. Aside from improved product performance, this also means a reduction in CO₂ emissions amounting to some 12,000 metric tons per year.

The idea of “achieving more with less” lies right at the heart of Henkel’s sustainability strategy. Henkel wants to create more value – for customers, consumers, the communities in which it operates and for the company itself – at a reduced environmental footprint. Hence innovations, products and technologies are required that offer more quality of life while reducing resource consumption. Since 2011, the Laundry & Home Care business unit has succeeded in cutting the carbon footprint of Henkel’s annual raw materials consumption related to total sales by an average of 4 percent per year by adopting just such an approach.

Enzyme research for innovations

Enzymes are important active ingredients in modern laundry and home care products. In recent years, particularly, they have contributed to substantially improving washing and cleaning performance at low temperatures. Henkel has spent the last three decades working intensively within research partnerships on the development of high-performance enzymes in



order to both fulfill future customer requirements and improve the sustainability performance of the company's products. Recently, for example, innovative enzymes offering even greater efficacy have been developed for optimized laundry care with Perwoll for woolens, and now also for liquid dishwashing detergents.

CO₂ reductions in Pril against Grease and Crust

The latest development from the field of enzymes involves their usage in combating starch soil such as the dried remains of rice and noodles. They have been incorporated in Henkel's hand-dishwashing product "Pril gegen Fett und Stärke" [Pril against Grease and Crust]. Henkel Research has succeeded for the first time in combining surfactants and enzymes to create a dishwashing product capable of splitting starch molecules. This leads to improvements in all phases of the product lifecycle. The greater cleaning power of enzymes means they are still effective at low temperatures, enabling a reduction in energy consumption. Dishwashing even in cold water produces the same gleaming results. And because enzymes replace a portion of the surfactants otherwise needed, material input is also reduced. Each year this means a saving of 2,000 metric tons in surfactant consumption which, in carbon footprint terms, corresponds to the annual CO₂ take-up of a wooded area three times the size of New York's Central Park.

Partnerships for success

An important focus of Henkel's activities in the field of sustainability is on strengthening cooperation with partners along the value chain. To facilitate development of the enzymes required for "Pril gegen Fett und Stärke," Henkel has been working closely with the company Novozymes, which received Henkel's "Sustainability Award Laundry & Home Care 2013" at the ACI Convention in Orlando, Florida, held at the beginning of this year.



Photo material is available at <http://www.henkel.com/press>

Henkel operates worldwide with leading brands and technologies in three business areas: Laundry & Home Care, Beauty Care and Adhesive Technologies. Founded in 1876, Henkel holds globally leading market positions both in the consumer and industrial businesses with well-known brands such as Persil, Schwarzkopf and Loctite. Henkel employs about 47,000 people and reported sales of 16.4 billion euros and adjusted operating profit of 2.5 million euros in fiscal 2013. Henkel's preferred shares are listed in the German stock index DAX.

Contact	Bettina Klinken	Catherin Freier
Phone	+49 211 797-8312	+49 211 797-9987
Fax	+49 211 798-9832	+49 211 798-9832
E-mail	bettina.klinken@henkel.com	catherin.freier@henkel.com