

# Innovative design **cuts waste** and packaging while keeping the **same product** volume



**More sales, fewer complaints. The design of the Rexona upside-down deo roll-on has gained Unilever yet another consumer success. The product is also top notch when it comes to the environment. The new design minimizes product loss during use, reduces production time, and saves tons of packaging plastic.**



**Unilever produces and sells a huge number of top brands in both the food and non-food sectors.** Among them are BeceL, Lipton, Bertolli, Dove, and Rexona. As part of their continuous search for better products and packaging, the group has established several development centres around

the world. One of the prime concerns of these centres is to take into account the impact of their products on the environment. A perfect illustration is the development of new packaging for Rexona deodorants.

### Less waste after use

**The R&D team has literally turned the deodorant container upside-down. The result? A more user and environmentally friendly product.** 'By enabling the bottle to be stored upside-down, gravity ensures that the fluid flows out immediately

without the user having to shake it first,' explains Henk Kielman, Technical Manager at Unilever Benelux. 'The risk of wasting useful product is considerably reduced as less product residue remains in the container when throwing it away.'

Approximately **14 % less** plastic

**The new design saves a serious amount of packaging plastic.** 'The bottle has the same 50 ml volume as its predecessor,' Kielman points out. 'Nevertheless, it requires 14% less packa-

ging plastic. Given the product's international popularity, this translates into an annual saving of hundreds of tons. This not only benefits the environment, it also cuts our costs.'

### Faster production limits energy consumption

**The new upside-down deo roll-on is produced 18% faster.** Remarkably, the bottle cap is smaller than before and requires 48% less production time. 'This time saving enables us to consume less

energy and cooling water,' observes Kielman. 'In short, the new design reduces our environmental impact in several phases of the product life cycle.'

Do you also have an interesting prevention project?

Did your company realize a successful packaging prevention project?

Let us know via [prevention@fostplus.be](mailto:prevention@fostplus.be)

good to remember

The Unilever R&D team always takes into account the **impact on the environment**

The new design of the Rexona deodorant dispenser **limits** the product **residue** after use and the **risk of leakage**

The packaging requires **less plastic and production time**

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How did Unilever design a **more user-friendly deodorant**?

### Step 1: upside-down design reduces waste

The designers came up with the idea to put the deodorant upside-down. This way gravity ensures the fluid always flows out of the bottle immediately, without shaking. To avoid leakage, the ball holder was equipped with two concentric valves and the bottle cap with bayonet seals.



### Step 2: Spider reservoir improves usability

A Spider reservoir in the neck of the bottle partitions the fluid more equally over the roller. This increases customer satisfaction and limits the risk that useful product winds up in the garbage bin.



### Step 3: less plastic and more efficient production

The new packaging has the same 50 ml volume as its predecessor. On average, the new design requires 14% less plastic. Moreover, the bottle cap and the bottle itself are produced more quickly, 48% and 18% respectively.

Old packaging



New packaging



By adjusting the design,  
you can extend the success of your  
products as well

#### Some tips from Unilever:

- Use the information from your customer complaint department. Complaints can be an important source of inspiration for a more user-friendly design of your packaging.
- Along with environmental impact, brand support is also an important parameter. The customer needs to recognize the packaging and immediately associate it with your brand.
  - Take into account the environmental impact throughout the entire value chain: from production to the processing of the packaging.

Henk Kielman, Technical Manager,  
Unilever Benelux:

‘The new design of our Rexona upside-down deo roll-on limits the environmental impact in several phases of the product life cycle.’

## Unilever and the environment

Unilever actively invests in sustainable development. Some realizations:

- Unilever launched a programme to substantially decrease the ecological footprint of its production. From 1995 to 2008 its CO<sub>2</sub> emission decreased by 39% and its water consumption dropped by 63% per ton of production.
- Unilever commits itself to acquire all of its palm oil from certified sustainable sources by 2015. It aims to buy all of the tea for its Lipton range of products from plantations with a Rainforest Alliance certificate.