

Eco packaging extends cosmetics shelf life

A technology that promises to extend the shelf life of cosmetics products whilst saving on packaging materials has been patented by French company Rosas.

{mosgoogle}The process, designed for thermoformer machinery, extends shelf life by complete oxygen removal, according to the company.

Significantly extending the shelf life of cosmetics will mean that products can be transported without having to regulate the temperature, giving it both economical and ecological benefits.

However, the technology is still in development. The challenge at present is to improve the quality of the plastic film, so that it remains air tight for longer.

Removing oxygen extends shelf life

Rosas maintains that removing the oxygen from a product will increase its shelf life. However with traditional thermoformer packaging methods it is difficult to remove 100 per cent of the oxygen.

The double chamber system developed by Rosas allows the tray sealing enclosure to be cleaned of oxygen before the introduction of the product. The product can similarly be completely sterilised in a separate chamber before it is introduced. This results in 100 per cent oxygen removal, says the firm.

All types of products, solid or liquid, that are packaged in this way can benefit from the technology, although further investigations need to be done into the exact extension of life possible for each product, Roland Rossi at Rosas told CosmeticsDesign.

The company states that the technology can also be used in the food and pharmaceutical industries as well as being used for packaging sensitive computer parts.

The technology also allows for up to a 15 per cent saving on the plastic film, according to Rosas, as the injection of the sterilising gases occurs in the sealing enclosure and not through perforated holes in the plastic, therefore reducing the width of the film needed.

Improving the quality of film

Rosas' has developed a prototype of the machine, however the technology is not yet available for the industry, mainly due to difficulties with the plastic film itself.

"Once heated and thermoformed the plastic doesn't remain one hundred percent air tight," Roland Rossi said.

"In the past there was no reason to develop plastic films that would last longer as no packaging machine was able to completely remove the oxygen" he added.

The company is calling for partners to help bring this technology to the industry.