

Why use evacuated / gassed cans for food?

A lot of manufacturers of high-quality products are gassing their cans. In gassed cans, pharmaceutical products or high-quality food products have a longer shelf-life and a significant improvement in quality.

By eliminating oxygen, the product can no longer oxidise or “perish”. The oxidable parts of the products, above all fats, proteins etc., retain their natural freshness when kept away from oxygen. The lower the oxygen levels in the product, the longer the can’s shelf-life. When gassing the cans, the oxygen is normally replaced by nitrogen. However, it is also possible to use a mixture of carbonic acids which have a certain conservation effect.

More and more countries make new regulations for the minimum of shelf-life and quality requirements for canned food products. The rules for a shelf-life guaranty in the EU countries are 2 years.

Which products are preferred for evacuation and gassing?

For decades now, gassing has been the standard method used for expensive, concentrated pharmaceutical products, such as vitamins. The gassing of cans is recommended for all types of food.

Here are a few canned products where gassing is the current quality standard:

- vitamins, pharmaceutical raw materials, medical or veterinary products
- soluble children’s food in powdered or granulated form, milk powder, diet products
- all forms of coffee, coffee substitute, instant products
- potato crisps, snack, pastries
- nuts, muesli, cereals
- meat products, cheese products

Evacuating, gassing – or both?

In principle, evacuation, i.e. the removal of the surrounding air, is sufficient to improve the shelf-life of products. This is the case for many fresh foods currently shrink-wrapped in film. But there is a problem when evacuating cans without gassing them: the cans can be completely destroyed. The can would collapse due to the internal vacuum and external pressure of the atmosphere. For this reason, the oxygen-laden air which is removed from the can must be replaced by an inert gas (nitrogen).