

SHELFPLUS® O₂

Oxygen Absorber – Active Packaging



SHELFPLUS® O₂ absorbs oxygen from the headspace of a package and it reduces the volume of oxygen that can penetrate a package from outside. The masterbatch can be integrated easily into your production process and can be used with standard materials (PE, PP, PA and EVA) to create an active multilayer barrier both in rigid and flexible film applications.

SHELFPLUS® O₂ is an iron based oxygen scavenger masterbatch which has been used in rigid packaging applications for more than 10 years. Recent developments have led to an improved performance and effectiveness of the additive thanks to a lower particle size and the addition of innovative patented additives.

These innovations have achieved a faster reaction speed of the oxygen absorbing properties in the process and has allowed the integration of SHELFPLUS® O₂ into flexible packaging formats such as lidding, stand up pouch and BIB.

SHELFPLUS® O₂ is used to extend shelf life of humid products that are sensitive to oxidation. In food products oxidation causes degradation of organoleptic properties and taste profiles, whilst in cosmetic products active ingredients such as vitamins can lose their nutritional properties and potency.

Recent studies carried out by an independent laboratory and a University have shown great improvements in package performance when SHELFPLUS® O₂ is incorporated. For example; it was demonstrated that using SHELFPLUS® O₂ in flexible film applications can demonstrably compensate for loss of barrier from 10 micron pinholes often found in lidding films or pouches. Another study showed that using SHELFPLUS® O₂ can significantly reduce the amount or need for often costly preservatives in certain products e. g. sulphites in wine.

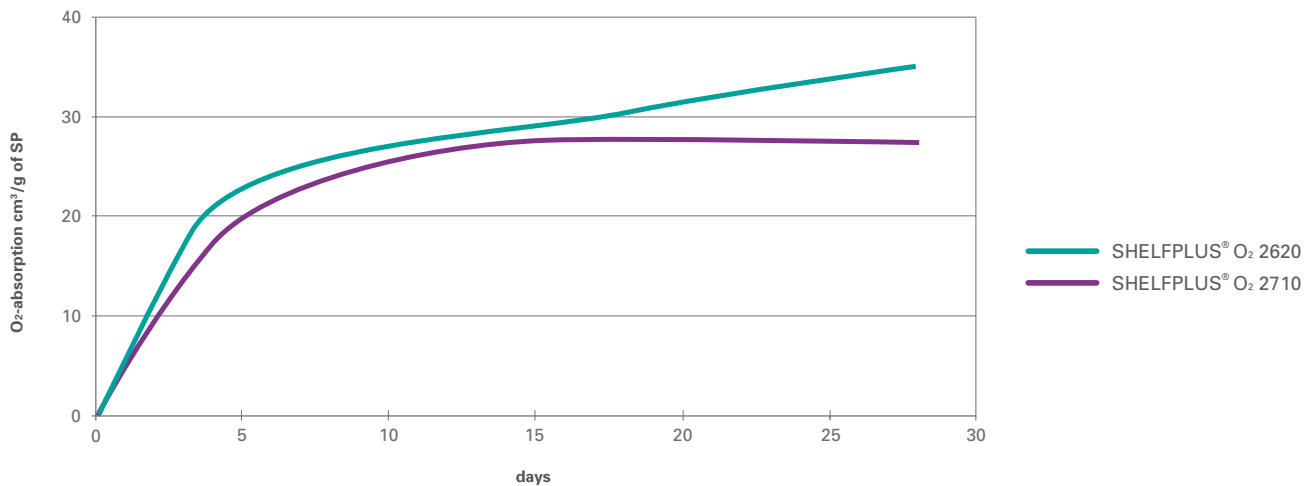
SHELFPLUS® O₂: Key facts

- Iron based O₂-absorber
- Activation by humidity
- Masterbatch
- Food approved FDA/EU/Active packaging
- Ideal for multilayer packaging
- Used in combination with passive barrier materials

SHELFPLUS® O₂

Carrier	Product	Use	Density	Remarks
PE	SHELFPLUS® O ₂ 2600	PE, PP, EVA	1.42	Activation by humidity
PP	SHELFPLUS® O ₂ 2710	PP	1.39	Activation with T°C > 95°C and humidity
EVA	SHELFPLUS® O ₂ 5100 DP	EVA, PE, PS	1.46	Activation by humidity
PA	SHELFPLUS® O ₂ 3302 DP	PA	1.54	Activation by humidity

O₂-absorption of Shelfplus grades



The graph shows the oxygen absorption of our standard grades, tested at 100% relative humidity, room temperature and a starting O₂ concentration of 21%.

SHELFPLUS® O₂: Applications at a glance

- Rigid multilayer food trays
- Co-injection IML Barrier
- Bag-In-Box
- Lidding films
- Co-extruded tubes
- Co-extruded blowmolded bottles
- Stand-up pouches

HEAD OFFICE

ALBIS PLASTIC GmbH
Mühlenhagen 35 · 20539 Hamburg
Tel.: +49 40 7 81 05-0 · Fax: +49 40 7 81 05-361
info@albis.com · www.albis.com

The information contained in this publication is based on our current knowledge and experience. However, due to the large number of factors that can influence our products when they are processed and used, it does not exempt processors from carrying out their own investigations and tests. Legally binding assurances of specific properties or of suitability for a specific purpose cannot be derived from our information. The recipient of our products is responsible for observing any applicable industrial rights as well as the existing laws and regulations.