



» PRODUCT BULLETIN

ColorMatrix™ Amosorb™ 4020G

Non-nylon based PET oxygen scavenger with lower haze and less impact on recycle stream

ColorMatrix™ Amosorb™ 4020G is a non-nylon based next generation oxygen scavenger for PET rigid packaging with a reduction in haze and lower impact on the recycle stream.

This technology ensures PET food & beverage packaging will protect its contents from oxygen ingress and help prolong product shelf life.

Compared to different types of food & beverage packaging, PET is often preferred because of its high clarity, can be easily recycled many times and offers brand owners freedom of design to differentiate their product packaging to create greater shelf appeal.

However, when active oxygen scavengers and other additives are used in PET bottle production clarity can decrease, which negatively impacts product appearance, customer appeal and brand value.

LOW HAZE

The new 4020G grade of ColorMatrix Amosorb offers similar oxygen scavenging performance as previous solutions with the added benefit of up to 50% lower haze, resulting in improved clarity and clearer looking bottles. With a reduction in both haze and pearlescence the packaging gives a premium feel.

RECYCLABILITY & rPET

Brand owners wishing to operate with a Circular Economy need to use higher levels of rPET in their packaging.

In order to satisfy the demand for a circular economy, governments are legislating increased use of recycled material in single use packaging. The EU's directive for use of recycled PET (rPET) in bottles will increase from 25% in 2025 to 30% in 2030. Brand owners need to ensure the oxygen scavengers used in their PET bottles maintain their oxygen scavenging efficacy with the introduction of increasing levels of rPET. Our testing shows that ColorMatrix Amosorb 4020G is one of the most robust oxygen scavengers for PET rigid containers, with negligible effect on oxygen scavenging efficacy for the rPET grade tested, while other competitive materials lost almost all efficacy with rPET content as low as 20%.

ColorMatrix Amosorb 4020G also lowers impact on the PET recycle stream due to a reduction in rPET yellowing. Compared to previous grades of Amosorb, 4020G halves the b* color shift resulting in lower impact on quality of rPET.

KEY BENEFITS

- Non-nylon based
- Up to 50% lower haze
- Lower impact on PET recycle stream
- 40% increased shelf-life at maximum allowable use limit
- No induction period, provides immediate protection
- Can be used with any PET & most rPET grades
- Simple to use with existing mono-layer equipment
- Suitable for use on multi-layer machines

MARKET & APPLICATIONS

- PET and rPET rigid packaging for food and beverage

REGULATORY

ColorMatrix Amosorb 4020G meets direct food contact regulatory requirements in major markets.

ColorMatrix Amosorb 4020E (left) & ColorMatrix Amosorb 4020G (right) demonstrating lower haze for a premium, clear appearance



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