# COLOR & ADDITIVES
# OXYGEN SCAVENGERS

## ColorMatrix™ Amosorb™ and ColorMatrix™ Amosorb™ Sol$O_2$

AVIENT

# THE AVIENT OXYGEN SCAVENGER PRODUCT FAMILY

ColorMatrix™ Amosorb™ additives are oxygen scavenging polyester concentrates that create an active barrier against the ingress of oxygen through the walls of PET containers. Amosorb provides a cost-effective and flexible package solution that can adapt to the requirements of specific foods and beverages for product protection and shelf life, while helping to achieve sustainability targets.

Amosorb Sol$O_2$ provides enhanced scavenging power combined with a passive $O_2/CO_2$ barrier and, where required, a color, which can be tailored to suit individual customer requirements.

These ready-to-use technologies offer extended shelf-life capabilities and the flexibility to manage the additional demands of rPET usage, resin compatibility and flexibility, sustainability, light-weighting, aesthetics, market seasonality and carbonated oxygen-sensitive beverages.

## APPLICATIONS

Amosorb™ and Amosorb™ Sol$O_2$ can help assure product quality, consistency, and extended shelf life for a wide range of oxygen-sensitive products including, but not limited to: beer, wine, fruit juices, nectars, teas, jar applications, UHT milk and dairy, sauces and condiments. They can be used for both mono- and multi-layer containers.

## PRODUCT RANGE HIGHLIGHTS

**Amosorb™ 4020E**

- Non-nylon based oxygen scavenging technology for PET
- Helps to prolong the shelf life of many products in major markets

**Amosorb™ 100**

- Non-nylon based oxygen scavenging technology for PET
- Developed to meet the needs of the North American market
- Featuring a special additivation package to allow for pre-consumer regrind

**Amosorb™ 4020L**

- Excellent bottle aesthetics
- Improved recyclability versus legacy grades
- PET and rPET compatible (up to 100% rPET)
- Ideal for medium-to-long shelf-life applications
- Non-nylon based active oxygen scavenger
- Can be used with monolayer and multi-layer applications

**Amosorb™ Oxyloop™-1**

- Excellent bottle aesthetics
- Endorsed by the European PET Bottle Platform (EPBP) for colored bottle-to-bottle recyclability (up to 3% LDR)
- PET and rPET compatible (up to 100% rPET)
- Ideal for short-to-medium shelf-life applications
- Non-nylon based active oxygen scavenger
- Can be used with monolayer and multi-layer applications

**Amosorb™ Sol$O_2$ -1 (non-carbonated/ carbonated) and Sol$O_2$ -2 (carbonated)**

- Nylon based oxygen scavenging technologies for PET
- Active barrier effect to prevent $O_2$ ingress
- Passive barrier effect to prevent gas ingress and digress from the packaging (i.e., $O_2$ and $CO_2$)

**Regulatory Information**

Information regarding EU, FDA, Mercosur, GB and food contact regulations available upon request.

**Handling**

ColorMatrix oxygen scavengers are supplied in sealed air and moisture-tight containers and require no drying before use.

The oxygen scavenger formulations are added to the PET melt using conventional pellet handling systems. Avient can provide full trial, analysis, and production support to optimize Amosorb technology used in a specific application.

**The ColorMatrix™ oxygen scavenger portfolio provides advanced product protection extending the shelf life of oxygen-sensitive beverages and foods packed in PET and rPET containers.**

**Targeted Solutions**

Avient offers oxygen scavengers that can be used with a wide variety of PET-based resins and rPET grades, while being suitable to use for both monolayer and multi-layer containers.

**Flexibility**

The level of oxygen barrier required can be easily tailored by assessing customer needs (i.e., product to be protected, bottle configuration, shelf life, etc.), and with the support (if needed) of a modeling service to maintain optimized performance.

**Easy Implementation**

Avient's oxygen scavengers are simple to use and require no activation. They can be run on standard injection blow molding machines, providing easy installation for quick and cost effective processing.

**Excellent Container Aesthetics**

When bottle blowing conditions are optimized, excellent container clarity can be achieved, also when used in combination with other ColorMatrix colorant technologies.

**Recyclability**

Amosorb and Amosorb Sol$O_2$ are 100% recyclable within dedicated recycling streams. In addition, ColorMatrix Amosorb Oxyloop-1 has been endorsed by the EPBP for colored bottle-to-bottle recycling at up to 3% LDR. Further information on recyclability is available upon request.

**1.844.4AVIENT**
**www.avient.com**