

## OXYNOV® Barrier Bottles



### 6-Layer EBM Bottles for Enhanced Protection

OXYNOV® barrier bottles are 6-layer extrusion blow-molded (EBM) pharmaceutical containers providing increased oxygen barrier protection when compared to standard polyethylene bottles of a similar size.

They provide barrier protection in pharmaceutical applications to inhibit oxidation and support the shelf life of drug products.

OXYNOV barrier bottles enables the reduced use of oxygen scavenger inside bottles.

#### High passive oxygen barrier:

OXYNOV barrier bottles significantly reduce the oxygen transmission rate (OTR) compared to standard bottles.

#### Full protection:

They can be paired with humidity neutral oxygen scavengers for an ideal package solution (e.g. with PharmaKeep®)

#### Degradation avoidance:

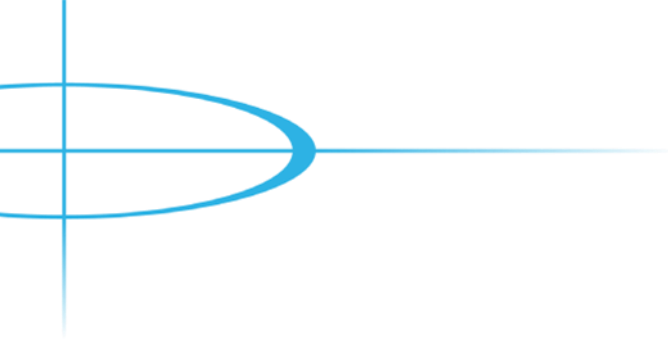
With OXYNOV, the chemical and physical degradation of drug products which can be show extreme appearance change (example with tablets below) can be mitigated.



With Protection



Without Protection



**Additional protective properties:** OXYNOV bottles offer an enhanced barrier to moisture and UV. Oxygen degradation, as well as moisture, is a major pathway for degradation of pharmaceuticals, probiotics and other healthcare products during production, isolation processes and storage.

A range of sizes are available to accommodate different packaging needs.

- BTL 40 cc      SP33/400 : material number 25388628001
- BTL 60 cc      SP33/400 : material number 25394228001
- BTL 100 cc     SP38/400 : material number 25394328001
- BTL 150 cc     SP38/400 : material number 32101728001
- BTL 200 cc     SP38/400 : material number 25394428001
- BTL 400 cc     SP53/400 : material number 25394528001

OXYNOV bottle neck finishes are SP400 compliant, so any screw cap produced according to this standard can be used (closures including induction seal is recommended for use with oxygen absorbers).

The bottle can also be customized for individual customer needs.

The 6-layer bottle structure offers barrier against oxygen and moisture:

- Inner layer HDPE
- Regrind layer
- Adhesive
- EVOH
- Adhesive
- Outer layer HDPE



OXYNOV bottles are compliant with US FDA and EU regulations for use in dry pharmaceutical and diagnostic applications. They are registered in a US-FDA Drug Master File and are compliant with the light & moisture vapor transmission requirements of USP Chapter <671> Supplement 2, Containers – Performance Testing.

Regulatory compliance may vary depending on the country and end-use application, please contact your Colorcon representative for more information.

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