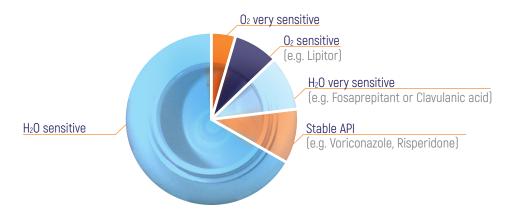


## **Barrier Packaging Solutions**

## What is the challenge?

up to 90% of all APIs used in pharmaceutical formulations are sensitive to moisture and/or oxygen and require passive or active protection.



## LOG's market-leading Barrier Packaging solutions:

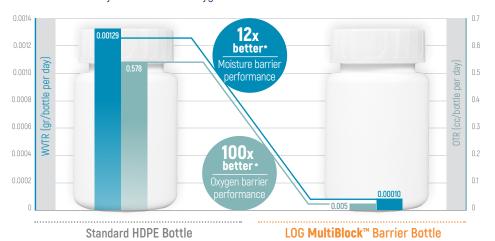






- Increase confidence to pass drug stability test
- Shorten drug formulation development time
- Reduce the need for desiccants with the goal of eliminating them
- Extend drug shelf life
- Reduce head space and packaging size
- Reduce total cost of ownership
- Are successfully used and endorsed by global pharmaceutical companies

MultiBlock™ multilayer moisture and oxygen barrier container versus standard HDPE container



- Oxygen Transmition Rate (OTR) According to ASTM F-1307 23°C 50% RH
- Water Vapor Transmission Rate (WVTR) According to ASTM F-1249, ASTM E-96 38°C 90% RH



\*Compared to a standard HDPE container

