

# A New Standard in Packaging Performance

## STORAGE STABILITY OF FIBER-BASED CLOSURES FROM BLUE OCEAN CLOSURES

Blue Ocean Closures develops fiber closures that are designed for real-world conditions. Storage stability is critical for both product quality and operational reliability. Our latest trials confirm exceptional resilience over time, even in uncontrolled environments.

### Real-World Warehouse Testing

Closures were packaged according to standard procedures and stored in non-climate-controlled warehouses. Samples were taken for testing monthly up to 6 months – ongoing quarterly to one year.

### Key Findings:

| Property                    | Result (0–6 months)                           |
|-----------------------------|-----------------------------------------------|
| Torque Performance          | Unchanged; consistent open/close resistance   |
| Visual Integrity            | No deformation, cracks, or surface changes    |
| Shape Consistency (Ovality) | Very low; superior to many plastic caps       |
| Outer Body Diameter         | Stable; no measurable deviation               |
| Headplate Thickness         | No swelling/shrinkage; density remains intact |

These results confirm the closures maintain full functionality throughout extended storage, supporting long shelf-life and logistical flexibility without material degradation.



### Aging Without Compromise

Closures are made from carefully selected high-density fibers, processed for structural precision and water stability. This composition enables dimensional durability without warping, shrinking, or torque loss. Key for reliable product protection over time.



# BLUE OCEAN CLOSURES

## Why Storage Stability Matters

Storage environments often vary. Unregulated warehouse climates – for example cold climates where plastics may become brittle – are a stress test for packaging materials. Blue Ocean Closures' fiber-based caps show no such vulnerabilities.

Whether stored for weeks or months, customers can rely on:

- Secure, consistent sealing force
- Stable appearance and mechanical function
- No compromise in cap performance at point-of-sale

## Designed for Long-Term Confidence

- Tested in realistic, industrial conditions
- Performance validated through monthly sampling
- No material fatigue, even under fluctuating humidity or temperature

These factors ensure the product meets quality standards not just on the production line – but all the way to the consumer.

## Blue Ocean Closures

- Leading the shift toward fiber-based packaging technologies. Our closures are:
- Fully recyclable in the paper stream
- Made from FSC®-certified renewable materials
- Food safe, ISO 22000 certified
- Compatible with standard 38mm / 45mm necks and filling lines

Our solutions enable sustainability without sacrificing function. Storage performance is just one example of how fiber can match – and exceed – the reliability of traditional materials.

