



Stick to Your Schedule, Not Your Shelves.

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- Market-proven technology for lyophilization stoppers
- Stoppers will not stick to lyo chamber pressure plates
 - Keep your production process on schedule



West 
By your side
for a healthier world™



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The No-Stick Stopper for Lyophilized Drug Products

Lyotec for Efficient Processing

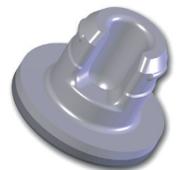
Lyotec stoppers have West FluroTec® film applied to their top surface. West FluroTec is a fluorocarbon film with a unique low-surface-energy characteristic that helps to eliminate stoppers from sticking to pressure plates and reduces stopper clumping in sterilizers and feeding bowls.

Lyotec for Optimized Performance

The Lyotec stopper's unique single-vent igloo design is effective in eliminating mechanical twinning, the interlocking of double-vented stoppers during processing.

Lyotec for Safety

Stopper performance in the lyophilization chamber is critical throughout the production cycle, whether processing is done in the pharmaceutical manufacturer's facility or at a contractor's site.



There's nothing more disheartening than a 48-hour lyophilization cycle that ends disastrously because the vial stoppers stick to the pressure plates of the chamber.

You lose product.
You lose time.
You lose money.
You'll probably even lose some sleep.



- For high-cost drug products, just a few damaged vials can add up to a huge loss.
- For cytotoxic drug products, a lyophilization chamber incident can trigger an even more expensive and dangerous environmental cleanup.
- For processing inside a barrier isolator, using Lyotec stoppers can help prevent a costly cleanup that breaches the sterile environment.
- Lyotec brings an added measure of safety to any lyophilization process.

Market-Proven Technology

"As our lyophilization chambers become more sophisticated, we've seen the need for a stopper that won't stick to the pressure plate at the end of a cycle. Throughout a rigid series of tests, Tests with FluroTec are giving us repeatable, excellent results."

— Ed Trappler, President *Lyophilization Technology, Inc.*

Converting to LyoTec Stoppers

Integrating LyoTec stoppers into production lines may require minimal regulatory review, especially for manufacturers who use an approved West configuration and formulation. Because LyoTec stoppers have a film applied only to the top, non-drug-contact surface, the extent of regulatory review may be dramatically reduced. West's regulatory experts will help ensure a smooth transition to LyoTec stoppers.

The Added Value of Westar® Processing

LyoTec stoppers can be enhanced with Westar RS (ready-to-sterilize) or Westar RU (ready-to-use) processing. Westar is a documented, validated procedure for washing and sterilizing stoppers that complies with current regulatory requirements.

Westar components can be packaged in a STERILIZABLEBAG for standard filling lines or in rapid-transfer port bags to provide aseptic transfer to filling lines contained in barrier isolator systems.

Choosing Westar RS processing for LyoTec stoppers may streamline manufacturing operations by reducing many of the steps related to closure preparation. With Westar RU components, pharmaceutical manufacturers can eliminate stopper preparation from their operation.

Who Benefits from LyoTec?

- Packaging professionals: You can continue using the same West elastomeric formulation and stopper configuration currently approved for your drug product.
- Manufacturing managers: You can prevent downtime and drug product losses caused by stoppers sticking to lyophilization chamber pressure plates and clumping in feeder bowls.

Specifying LyoTec stoppers can help improve productivity and efficiency, saving time and money. To learn more about LyoTec and request product samples, contact your West account representative.

West's LyoTec stoppers have the demonstrated advantage of not adhering to the pressure plates of the lyophilization chamber.

LyoTec stoppers:

- Eliminate drug product loss due to sticking.
- Keep your production process on schedule.



...een a growing need for elastomer closures that do not adhere to the
..., FluroTec coated closures consistently release as the plate is lifted.



To learn how LyoTec stoppers can help keep your production process on schedule, call your West account manager or a Technical Customer Support representative or visit our website at westpharma.com.

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