



# West Ready Pack<sup>®</sup> System

## Stack-Up Assessment of the West Ready Pack System

West Pharmaceutical Services strives to provide superior packaging options to customers for its stopper, seal and vial combinations. In order to help achieve this, West offers the Ready Pack system of ready-to-use sterile vials, stoppers and seals. To determine if vial, stopper and seal combinations provide acceptable packaging solutions, stack-up calculations were generated for each of the component combinations. An excess seal skirt length of approximately 0.030 inches or slightly greater is required for an acceptable crimp on a vial. In order to determine what the excess skirt length is, one assumes that there is 20% compression of the elastomer, the aluminum thickness is 0.008 inches, and all calculations are based on nominal values. If the mean skirt length is 0.247 inches and the aluminum thickness is 0.008 inches, the aluminum thickness is subtracted. For more information, request technical support bulletin 2008/120.

## West Ready Pack Component Container Closure Integrity Assessment

West Pharmaceutical Services (West) strives to provide superior packaging options to customers for its stopper, seal and vial combinations. In order to help achieve this West offers ready-to-use sterile stoppers, vials and seals (West Ready Pack). In order to determine if vial, stopper and seal combinations provide acceptable packaging solutions, a capping study was performed to test for appropriate percent compression and corresponding residual seal force and the combinations were tested using helium leak and blue dye ingress. For more information, request technical support bulletin 2008/126.

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## **West Ready Pack System - Stopper Stability Testing**

The Ready Pack system is being offered to our customers to provide a conveniently packaged ready-to-use system of stoppers, vials and seals that allow our customers to save time, eliminate waste and reduce risk. The purpose of this technical report is to provide the results of chemical, functional and physical testing as well as package integrity testing performed on four items of Ready Pack stoppers. Testing was conducted at Time 0, 3 months and 6 months. This study is on-going and this report will be updated as data is collected. For more information, request technical support bulletin 2008/122.

West Ready Pack® is a registered trademark of West Pharmaceutical Services, Inc., in the United States and other jurisdictions.