# thermo scientific

INFORMATION SHEET

# Capitol Vial triple seal design

Thermo Scientific™ Capitol Vial™ Flip-Top containers feature a unique triple seal design for superior sample security. Our proprietary resin curing process prevents air and liquids from entering or exiting the container so that customers can rest assured that their samples are well protected during handling, storage, and transport.

### Our proprietary triple seal design

There are 3 critical components to the triple seal design: the hinge, the lid, and the container. The hinge permanently attaches the lid to the container wall and ensures proper alignment of the sealing surfaces as they make contact. The top figure to the right depicts the container features and position as the lid is closed.

#### Seal 1

The first seal is formed by the union of the lid valve with the inside of the container wall. The integrity of this seal is maintained by securely fastening the top of the container into the small space between the lid valve and wall. The structural interference caused during closing, and the shrinkage that occurs as the resin cures, creates an airtight seal.

## Seal 2

The second seal is formed by the top edge of the container wall and the inside wall of the lid. This provides a leak-resistant seal that prevents liquids from entering or exiting the container.

#### Seal 3

The third seal is created by the outer container wall and the undercut around the inside wall of the lid. This seal provides another layer of leak protection and also determines the amount of internal air pressure the container will withstand.

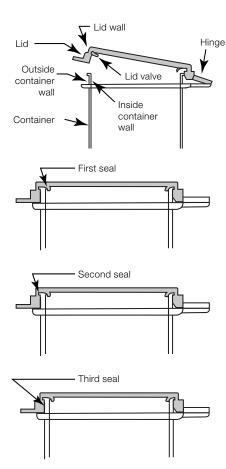


Figure 1. Container features and location of each seal.

For more information on Capitol Vial products, please visit **thermofisher.com/capitolvial** 

