

AT-Closed Vial® Ready-to-fill closed vial

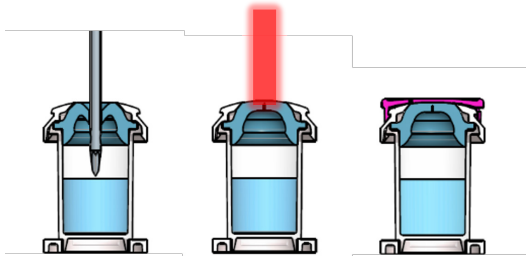
The AT-Closed Vial® technology offers a fully closed, pre-sterilized, ready-to-fill solution that enhances product safety by greatly lowering contamination risks during filling.

AT-Closed Vial® – Ready-to-fill closed vial

Process

The AT-Closed Vial® is filled in three simple steps.

- Filling: The vial is filled through the stopper with a specialized sterile needle. Once the needle is withdrawn, the stopper re-closes mechanically as a result of its elastic properties
- Laser re-sealing: The stopper is resealed with a one second laser shot
- Capping: The sterile snap-fit cap is placed on the vial to maintain stopper protection up to the point of product collection



Container Closure Integrity

- At temperatures as low as -196°C
- Vial bodies and stoppers molded and assembled in ISO5, chemical bonding between COC and TPE

Compliance

- ISO 15378:2017
- Full Validation Master Plan

Reliability

- Validated robustness
- Gamma irradiated prior to shipping

Vial and packaging range

- Vial volume range from 1 mL to 50 mL
- Available in 3 different packaging configurations

Specifications

Application	Aseptic fill & finish
Vial volume	1 mL, 2 mL, 6 mL, 10 mL, 20 mL, 50 mL
Materials - vial body	Cyclo-Olefin Copolymer (COC)
Materials - stopper	Thermoplastic Elastomer (TPE)
Materials - top ring	Acrylonitrile Butadiene Styrene (ABS)
Materials - bottom ring (1-2 mL)	Acrylonitrile Butadiene Styrene (ABS)
Temperature resistance	Container Closure Integrity at temperatures as low as -196°C
Packaging	Available in AT-CryoBox (for manual operations and semi-automated filling lines), AT-Nest (for automated filling lines) and AT-Tray (bulk)
Validation	Validation Master Plan provided with the purchase of filling equipment
Compliance	All product contact materials meet or exceed USP Class VI and EP requirements for pharmaceutical primary containers

AT-Closed Vial®	1 mL	2 mL	6 mL	10 mL	20 mL	50 mL
Height (in mm, + 1 mm when capped)	33.10	33.10	39.30	49.80	61.20	84.90
External vial diameter (in mm)	18.30	22.30	25.00	25.00	30.00	36.00
Maximum volume filled (in mL)	1.35	2.25	7.60	11.70	21.80	45.00

