

CapDisc: One-step point-of-care diagnostic testing of bodily fluids

Sample—Twist—Test

SAFE-T-FILL	An existing device for sampling blood
	 Separate reagent reservoir Multi-part assembly Multi-step use Achieving correct sample and reagent volume requires careful measurement Biohazards require careful disposal Subject to environmental & cross contamination
CAPDISC	One-step simplifies use, reduces total cost and improves safety and accuracy
	 + Pre-filled reagent + Integrated assembly + One-step process: sample, twist, test + Sample and reagent volume defined by geometry of the device, increasing accuracy + No capillary tube or reagent filling means human variable eliminated + Single use, tamper-proof, contamination-proof + Reduced total cost

FABRICATION & FUNCTION

- · Can use standard multi-cavity tooling or in-mold assembly
- · CapDisc orifice captures fluid by standard capillary action
- · Defined sample volumes: 10 μL to 100 μL
- Twist of cap transfers fluid to sealed, sterile, prefilled reservoir for testing
- · Compatible with any optical measurement
- · Compatible with "wet" and "dry" chemistry
- Simple and precise to use with minimal training
- Sealed system eliminates contamination and reduces biohazard