Checkit® Go: Validate the Accuracy of Your Liquid Handlers by Transforming Your Sample Solution to a Test Solution.

NEXT ADVANCE
Innovative Lab Products for the Life Sciences

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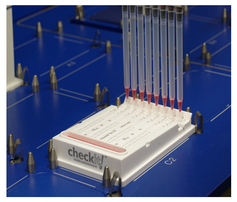
Overview

- The physical properties of different liquids typically vary due to their differences in density, viscosity, surface tension, etc.
- These differences in physical properties of the liquids can alter their dispensed volume by a liquid handling system.
- Using water as the default liquid class setting can introduce errors while dispensing most commonly dispensed sample liquids. (EtOH, DMSO, GLY, etc.)
- It is best to use the sample liquids† as the test liquid‡ while optimizing the liquid handlers to be precise.
- The Checkit® Go uses capillary technology which is compatible with most typical sample liquids and concentrations.

Introduction



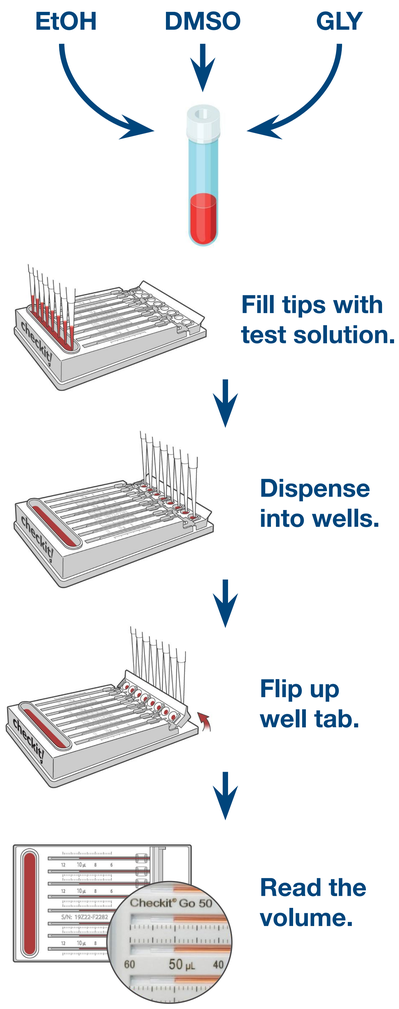
Challenge:

Test liquids used to verify the accuracy of liquid handlers should reflect the physical properties of the sample liquids.

Objective:

Determine if the Checkit® Go allows for the use of common sample liquids (EtOH, DMSO, GLY).

Methods



Results

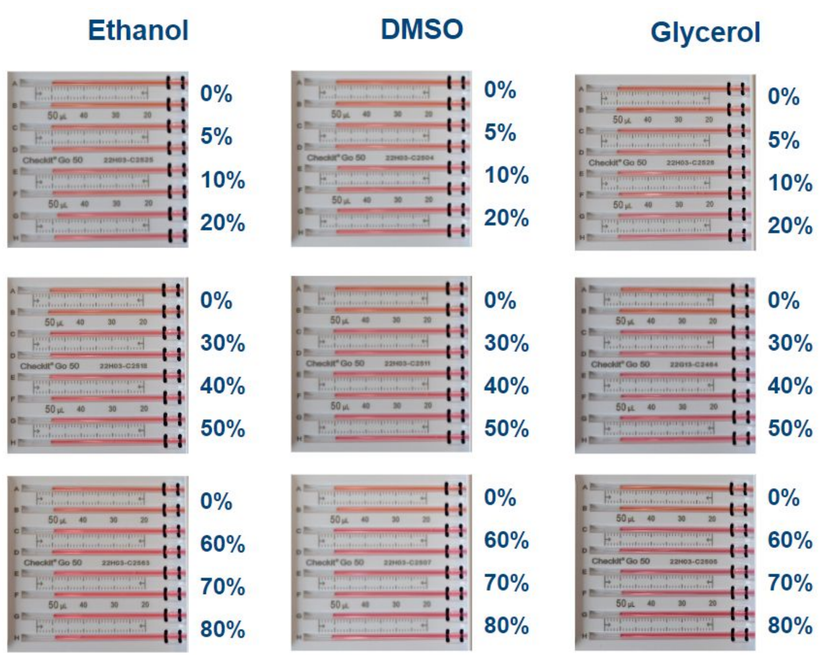


Table 1: Checkit® Go is compatible with most typical sample liquids.

Checkit® Go Models	Concentrations Tested: 5% - 80%		
	Ethanol	DMSO	Glycerol
Checkit® Go - 5µl	✓	✓	✓
Checkit® Go - 10µl	✓	✓	✓
Checkit® Go - 20µl	✓	✓	✓
Checkit® Go - 50µl	✓	✓	✓

Discussion

- The Checkit® Go was compatible with ethanol, DMSO, and glycerol concentrations up to 80%.
- Accurate measurements were observed across all of the different Checkit® Go models.

Conclusion

Checkit® Go cartridges and lyophilized dye pellets enable the validation of automated liquid handlers with a test liquid that reflects the physical properties of the desired sample liquid.

Questions?

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† Sample Liquids - the liquids routinely dispensed.

‡ Test Liquid - the liquid used for validation.

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