

Heat Stability of PRO-Clean Protein Residue Test

Introduction

PRO-Clean is a ready-to-use, high sensitivity, rapid test for detection of protein residues on surfaces after cleaning. Hygiena has studied the effects of storing devices under high heat to determine device performance.

Method

Devices were stored in their packaging at a constant temperature of 37°C (98.6°F) for up to four weeks. Control devices were stored at 4°C over the same period. Devices were tested at multiple timepoints by inoculating swabs with a known amount of bovine albumin serum (BSA) protein standard around the limit of detection. Devices were activated and incubated at 22°C for 10 minutes. Devices were studied for the loss of detection of the protein sample.

Results and Discussion

PRO-Clean devices stored at 37°C and 4°C detected BSA at low concentrations across all timepoints.

Table 1. PRO-Clean Devices Stored at 37C vs 4C		
Storage Temperature	37°C	4°C
Storage Time (Days)	20ug BSA per swab	20ug BSA per swab
0	Detected	Detected
7	Detected	Detected
14	Detected	Detected
21	Detected	Detected
28	Detected	Detected

Conclusions

Devices which endure temperature abuse above 4°C for up to 4 weeks performed equivalently to devices stored under appropriate conditions.