

HexChecks™ Testing Swabs Temperature Range

Temperature Range

HexChecks Testing Swabs were tested on Mil-Spec chromate primed panels (MIL-PRF-23377 Type 1 Class C, PPG CA 7233) in a temperature range of -54C to 70C (-65F to 158F). Panels were cooled via immersion in dry ice. Panels were heated via a Lindberg BlueM convection oven. Temperatures were verified with a Fluke infrared thermometer.

A HexChecks Testing Swab was rubbed on the chromate primed surface for 20 seconds at each temperature. Results are recoded below.

The liquid in HexChecks Testing Swab has a freezing point of approximately -7C (19F). Above its freezing point, the HexChecks Testing Swab will change color at a slower rate at cooler temperatures but will still indicate the presence of hexavalent chromium. At high temperatures, the reaction proceeds at a rapid rate with flash evaporation of the liquid the limitation at extremely high temperatures.

Temperature (°C)	Result
-65	Frozen, no color
-50	Frozen, no color
-30	Frozen, no color
-20	Frozen, no color
-15	Frozen, no color
-10	liquid, no color
-5	liquid, light purple
0	purple
10	purple
20	purple
30	purple
40	purple
50	purple
60	purple
70	light purple, flash evaporation of liquid