



Steam Chemical Process Indicators

Steam Chemical Process Indicators (CPIs) are manufactured to meet performance specifications described in ISO 11140-1 "Sterilization of health care products - Chemical indicators - Part 1: General requirements," for Class 1 Process Indicators. The blue-to-pink color transition is sensitive to time, temperature and the presence of saturated steam (see chart to right). Steam CPIs are not intended for use as sterility indicators, but rather as throughput process indicators used to monitor exposure to steam sterilization processes.

Steam CPIs are labeled with 24 months of shelf life and room temperature storage. The shelf life is based on the date the indicating ink is applied to the substrate. Product may have a shelf life of less than 24 months at the time of purchase. Labeled storage conditions should be observed at all times to maintain optimum sensitivity.

Exposed indicators are stable and will remain pink when stored under labeled conditions. Each roll is individually packaged with a certificate of conformance to ensure the products' quality and consistency.

Steam CPIs are non-odorous and non-hazardous to use. The printed labels are safe to dispose in general waste receptacles. No MSDS required per CFR 1910.1200.

Process Indicator Configurations

Code	Product Type	Number of Indicators / Roll	Example
CPI-S01	Plain 1/2" (12.7 mm) circles	5,000	
SP-S05	2.5" x 1.5" label with indicator	1,000	

Product Color Change Performance¹ Steam Chemical Process Indicators

Product CPI-S01

Unexposed		Dry Heat ² 140°C 30 minutes	
Saturated Steam ³ 121°C - 3 minutes		Saturated Steam ³ 134°C - 0.5 minutes	
Saturated Steam ⁴ 121°C - 10 minutes		Saturated Steam ⁴ 134°C - 2 minutes	

¹ Samples are representative of performance according to ISO 11140-1, for Class 1 Process Indicators.

² After exposure to a dry heat process at 140°C for 30 minutes, the indicator shall show either no change or a change that is markedly different from the change occurring after exposure to a steam process.

³ After exposure to shortened steam cycles, a change to pink similar to Pantone® 677 C or lighter can be expected.

⁴ After exposure to a steam sterilization process, an endpoint color of pink similar to Pantone® 684 C or darker can be expected.