



## Chemical Process Indicators (CPIs) For Monitoring Ultra-Violet (UV) Disinfection Processes

True Indicating Code: CVYR-1



### Product Description

True Indicating UV Chemical Process Indicator labels contain no lead or other toxic heavy metals. The Indicators are manufactured to monitor whether UV disinfection conditions were met at the point of application. The Indicators are designed using latex-free pressure sensitive adhesive and are for use with UV Disinfection systems and processes operating as low as 50 mJ/cm<sup>2</sup>.

### Physical Properties

Process	UV Disinfection
Dimensions	12.7 mm (1/2") Dot
Packaging	1,000 Indicators/Roll
Chemical Indicator	Initial Color: Yellow Signal Color: Red

### Indications for Use

- Minimum Dosage: 50 mJ/cm<sup>2</sup>

See Performance Characteristics on Page 2 for range of color transition at various dose levels.

UVC radiation is a known disinfectant for air, water, and nonporous surfaces. UVC radiation has effectively been used for decades to reduce the spread of bacteria and viruses. UVC radiation has been shown to destroy the outer protein coating of viruses. The destruction ultimately leads to inactivation of the virus.

### Instructions for Use

Use an Indicator in various locations within a room or on each item, pack, peel pouch, or tray intended for disinfection. Process room or packages/items as required.

Upon exposure to UV, the Indicator will transition from Yellow to Red. The transition color may vary depending on the length and conditions of exposure. A color transition from Yellow to a shade of Dark Orange/Red provides indication of exposure to UV. The longer the dose of UV, the deeper the signal color will become. If signal color is not achieved, this suggests ideal conditions may not have been met. If the process was not successful, re-process using a new Indicator.

The chemical reaction which causes the color transition is a UV specific reaction and is irreversible under most conditions. Post exposure storage near pH basic environments such as reagents or cleaning product fumes may cause involuntary reversion from Red back to Yellow/Orange.





## Performance Characteristics

Result Availability		Immediately following exposure to UV	
Unexposed	25 mJ/cm <sup>2</sup>	75 mJ/cm <sup>2</sup>	100 mJ/cm <sup>2</sup>
			

Colors shown are representations of printed ink initial and signal colors but may vary from actual use.



The signal color achieved from exposure to UV may vary from the example above due to differences in processing parameters (i.e. load content, cycle time, radiation dose etc.) A color change to any shade of Dark Orange/Red produced during exposure to UV which is different from the initial color is considered acceptable.

## Storage and Shelf Life

	15°C to 30°C		Keep away from Sunlight
	20% to 80% Relative Humidity		Keep Dry
<b>Shelf Life</b>	3 years from the date of manufacture. The date of manufacture is based on the day the Indicating Ink is applied to the substrate. The remaining shelf life upon receipt will be shorter than 3 years.		
	Keep away from sterilants. Keep away for all forms of light until ready for use. Do not use damaged Indicators or Indicators which have transitioned to Red. Do not use after expiration date.		

## Disposal

Discard as general waste.

