

## Vaporized Hydrogen Peroxide/Plasma (VH<sub>2</sub>O<sub>2</sub>) Indicator Ink for Flexography Printing Processes



IPYB-01

True Indicating's VH<sub>2</sub>O<sub>2</sub> Ink, Product Code IPYB-01, is a flexographic ink formulation used to monitor exposure to vaporized hydrogen peroxide/plasma conditions. The ink is a water based formula which contains no heavy metals or other harmful materials and has low VOC's.

Physical Properties		
Process	VH <sub>2</sub> O <sub>2</sub> /Plasma	
Ink Carrier	Water	
Packaging	HDPE or equivalent containers	
рН	8.5 – 10.0	
Viscosity Zahn Cup # 2	15 - 25 seconds	
Ink Appearance	Thick blue liquid	
Printed Indicator Color	Initial Color: Yellow Signal Color: Blue	
Anilox Roller	200 – 100 lpi	
Flexographic Line Speed	≥150 ft./min.	

## Intended Use

Indicator Ink is intended for manufacture of VH<sub>2</sub>O<sub>2</sub> Process and Multi-Critical Variable Indicators. The Indicators are intended for use in distinguishing processed from unprocessed goods or to indicate exposure to a sterilization process at a stated value (SV). Validation of Indicators and their performance is at the discretion of the manufacturer. The Indicator Ink has been confirmed to be ISO 11140-1:2014 Type 1 compliant on Tyvek® or Film when exposed per the conditions outlined below.

Type 1 Process Indicator	2.3 mg/L VH <sub>2</sub> O <sub>2</sub> at 50°C for 6 minutes
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Printed Indicators manufactured with ink IPYB-01 can be used at temperatures between 30° and 80°C.



True Indicating, LLC 946 Kane Street, Suite A Toledo OH 43612-1372 T: 419-476-7119 www.TrueIndicating.com

Email: info@trueindicating.com

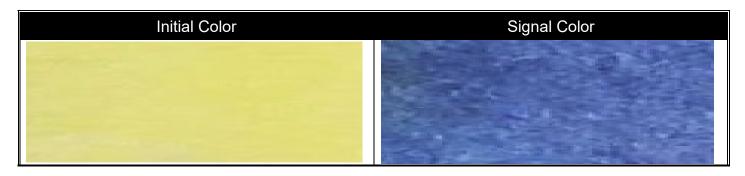
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## Instructions for Use

IPYB-01 is intended for flexographic printing onto either Tyvek® or film-based substrates.  $VH_2O_2$  exposure of printed ink will transition from yellow to blue. The shade of initial and signal color will depend on the thickness of ink printed, the substrate onto which it is printed, and the exposure conditions; lengthy exposures continuing longer than 4 hours may lead to a bleaching effect leaving of the indicator faint blue or a white color.

Colors shown are examples of actual printed ink using a 165 lpi Anilox roller and Tyvek<sup>®</sup>. Signal or end point color will vary due to printing conditions and exposure variables.



Storage and Shelf Life	
Shelf Life	6 months from date of manufacture
+15°C	15°C to 30°C (Protect from heat sources)
	Keep away from sterilant and other chemical agents. <b>Do not reuse ink!</b> Discard all remaining ink.  Up to 5% by weight of water or ether can be added to the ink to decrease dry time.
20%	20% to 80% Relative Humidity

## **Disposal**

Dispose in accordance with all federal, state, provincial, and local regulations. This material does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CRF 261.



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