

Date Updated: June 2021

Document Number: 1-13-3-SDS-125 Revision 01

 $According\ To\ Federal\ Register\ /\ Vol.\ 77,\ No.\ 58\ /\ Monday,\ March\ 26,\ 2012\ /\ Rules\ and\ Regulations\ And\ According\ To\ The\ Hazardous\ Products\ Regulation\ (February\ 11,\ 2015).$ 

Version: 2.0

Section 1 – IDENTIFIC	CATION	version: 2.0	
1.1. Product Identifier			
Product Form:	Mixture		
Product Name:	Hydrogen Peroxide Indicating Ink		
Product Code:	IPVP-01		
Synonyms:	None		
1.2. Intended Use of Prod	luct		
Print Flexographically on Ty	vek or BOPP substrate for Hydrogen Peroxide Sterilization Process	es. For Professional Use Only.	
1.3. Name, Address, and	Telephone of Responsible Party		
Company:	True Indicating, LLC.		
Address:	946 Kane St., Suite A, Toledo, Ohio 43612		
Phone:	419-476-7119		
Email:	info@trueindicating.com		
Website:	www.trueindicating.com		
1.4. Emergency Telephor	ne Number		
Phone:	248-982-6492		
Section 2 – HAZARDS	IDENTIFICATION		
Classification of Substance or Mixture (GHS-US/CA):	Skin Irrit. 2 Eye Irrit. 2A	H315 H319	
Hazard Pictograms (GHS-US/CA):	<u>(!)</u>		
Signal Word	Warning		
(GHS-US/CA): Hazard Statements	H315 – Causes skin irritation		
(GHS-US/CA):	H319 – Causes serious eye irritation		
Precautionary Statements (GHS-US/CA):	P202 – Do not handle until all safety precautions have been read and understood P264 – Wash skin thoroughly after handling P270 – Do not eat, drink or smoke when using this product P273 – Avoid release into the environment P280 – Wear protective gloves/ protective clothing/ eye protection/ face protection P302+P352 – IF ON SKIN: Wash with plenty of water P305+P351+P338 – IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P362 – Take off contaminated clothing and wash before reuse. P401 – Store in original container. P501 – Dispose of contents/container in accordance with local, regional, national, provincial, territorial and international regulations.		
Other Hazards:	Exposure may aggravate pre-existing eye, skin or respiratory con	ditions.	
Unknown Acute Toxicity (GHS-US/CA):	No data available.		



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Section 3 – COMPSITION / INFORMATION ON INGREDIENTS				
Component Name	Synonyms	Product Identifier	% *	GHS Ingredient Classification
Ammonium Hydroxide	Ammonia, aqueous solution / Ammonium hydroxide ((NH4)(OH)) / Ammonia aqueous / Ammonia solution / AMMONIUM HYDROXIDE / Ammonia, aqueous / Ammonia solutions / Ammonia% / Ammonia water	(CAS No.) 1336-21-6	2.0	Corr. Met. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Proprietary Mixture	NA	NA	98.0	Eye Irrit. 2A, H319

Full text of H-phrases; see Section 16

<sup>\*</sup>Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

Section 4 – FIRST AID MEASURES		
4.1. Description of First-A	id Measures	
General:	Consult a Physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. Remove contaminated clothing.	
Eye Contact:	Do not rub eyes. Immediately flush with water for at least 15 minutes. Remove any contact lenses and continue rinsing with eyelids held open. Consult an eye specialist.	
Skin Contact:	Wash affected areas thoroughly with soap and water. Get medical attention if irritation develops or persists.	
Ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth thoroughly. Do not induce vomiting. Seek medical attention.	
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. Seek medical attention.	
4.2. Most Important Symp	otoms and Effects Both Acute and Delayed	
General:	Causes skin irritation. Causes serious eye irritation.	
Eye Contact:	Contact may cause severe irritation with redness and swelling of conjunctiva.	
Skin Contact:	Redness, pain, swelling, itching, burning, dryness, dermatitis.	
Ingestion:	May cause adverse effects.	
Inhalation:	Prolonged exposure may cause irritation.	
Chronic Symptoms:	See section 2 and section 11	
4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed		

#### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

Treat Symptomatically. If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

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Section 5 –	KIKK	s il CT i	IIIIN(T	NY IJA	SURES

5.1. Extinguishing Media			
Suitable Extinguishing Media:	Water spray, dry powder, alcohol-resistant foam.		
Unsuitable Extinguishing Media:	Do not use heavy water stream. Use of heavy stream may spread fire.		
5.2. Special Hazards Arising From the Substance or Mixture			
Fire Hazard:	Not considered flammable, but may burn at high temperatures. Harmful vapors, evolution of fumes/fog.		
Explosion Hazard:	Product is not explosive.		
Reactivity:	Hazardous reactions will not occur under normal conditions.		
5.3. Advice for Firefighters			



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Precautionary Measures Fire:	Exercise caution when fighting any chemical fire.
Firefighting Instructions:	Use water spray or fog for cooling exposed containers.
Protection During Firefighting:	Do not enter fire area without proper protective equipment, including respiratory protection.
<b>Hazardous Combustion Products:</b>	Hydrocarbons. Carbon oxides (CO, CO <sub>2</sub> ). Nitrogen compounds. Zinc oxides.
Other Information:	Do not allow run-off from firefighting to enter drains or water courses.
5.4 Reference to Other Sections	

## **5.4. Reference to Other Sections**

Refer to Section 9 for flammability properties.

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Section	6 - 40	KINILIAI		EASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures			
General Measures:	Use Personal Protective Equipment (PPE). Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray. Ensure adequate ventilation.		
6.1.1. For Non-Emergency Personnel			
<b>Protective Equipment:</b>	Use appropriate PPE.		
<b>Emergency Procedures:</b>	Evacuate unnecessary personnel.		
<b>6.1.2. For Emergency Personnel</b>			
<b>Protective Equipment:</b>	Equip cleanup crew with proper PPE.		
Emergency Procedures:	Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.		
6.2. Environmental Precautions			

Prevent entry to sewers and public waters. Avoid release to the environment.

### 6.3. Methods and Materials for Containment and Cleaning Up

	U I
For Containment:	Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for Cleaning Up:	Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal.

#### **6.4. Reference to Other Sections:**

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

## Section 7 – HANDLING AND STORAGE

7.1. Pr	ecautions	for Saf	e Hand	lling
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Additional Hazards When	Handle in accordance with standard industrial practices, and ensure appropriate ventilation. Avoid
Processed:	all contact with skin, eyes, clothing. Do not release into the environment.
Precautions for Safe Handling:	Avoid contact with skin, eyes and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not handle until all safety precautions have been read and understood.
Hygiene Measures:	Handle in accordance with good industrial hygiene and safety procedures.
72 Conditions for Safa Storage	Including Any Incompatibilities

7.2. Conditions for Safe Storage, Including Any Incompatibilities		
Technical Measures:	Comply with applicable regulations.	
Storage Conditions:	Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area.	
Incompatible Materials:	Strong acids, strong bases, strong oxidizers.	
7.3 Specific End Heafs)		

7.3. Specific End Use(s)



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Print Flexographically on TYVEK or Film Substrate for Hydrogen Peroxide Sterilization Processes. For Professional Use Only.

### Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

#### 8.1. Control Parameters

For Substances listed in Section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer or appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

- REL = Recommended Exposure Limit
- PEL = Permissible Exposure Limit
- TLV = Threshold Limit Value

8.2 Exposure Controls

- TWA = Time-Weighted Average (8 hours)
- CEIL = Ceiling (maximum allowable exposure limit for an airborne substance)
- STEL = Short term (15 minutes) Exposure Limit
- NE = Not Established

Ammonium Hydroxide (1336-	21-6)	
USA ACGIH	ACGIH TLV (TWA)	25 ppm (respirable particulate matter)
USA ACGIH	ACGIH TLV (STEL)	35 ppm (respirable particulate matter)
USA NIOSH	NIOSH REL (TWA)	25 ppm
		$18 \text{ mg/m}^3$
USA NIOSH	NIOSH REL (ST)	35 ppm
	` ´	27 mg/m <sup>3</sup>

6.2. Exposure Controls	
Appropriate Engineering Controls:	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.
	Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.

**Personal Protection Equipment:** 









<b>Materials for Protective Clothing:</b>	Chemically resistant materials and fabrics.
Hand Protection:	Wear protective gloves.
Eye and Face Protection:	Chemical safety goggles.
Skin and Body Protection:	Wear suitable protective clothing.
Respiratory Protection:	Exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.
Other Information:	When using, do not eat, drink or smoke.

## Section 9 – PHYSICAL / CHEMICAL PROPERTIES

9.1. Information on Basic Physi	9.1. Information on Basic Physical and Chemical Properties	
Physical State:	Liquid	
Appearance:	Violet Liquid	
Odor:	Arid / Ammonia	
Odor Threshold:	Not Available	
pH:	9.0 - 10.5	
Evaporation Rate:	Not Available	
Melting Point:	Not Available	
Boiling Point:	Not Available	



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Freezing Point:	Not Available
Flash Point:	Not Available
<b>Auto-ignition Temperature:</b>	Not Available
<b>Decomposition Temperature:</b>	Not Available
Flammability:	Not Available
Lower Flammability Limit:	Not Available
Upper Flammability Limit:	Not Available
Vapor Pressure:	Not Available
Relative Vapor Density at 20°C:	>1
Relative Density:	Not Available
Specific Gravity:	Not Available
Solubility:	Water 100%
Partition Coefficient: N-Octanol/Water	Not Available
Viscosity:	Zahn Cup #2 15-30 Seconds

## Section 10 – STABILITY AND REACTIVITY

#### 10.1. Reactivity

Hazardous reactions will not occur under normal conditions.

#### 10.2. Chemical Stability

Stable under recommended handling and storage conditions (see Section 7).

## 10.3. Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to Avoid

Direct sunlight, extremely high or low temperatures, and incompatible materials.

## 10.5. Incompatible Materials

Strong acids, strong bases, strong oxidizers.

#### 10.6. Hazardous Decomposition Products

None expected under normal conditions of use.

## Section 11 – TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product	
Acute Toxicity (Oral):	Not classified
Acute Toxicity (Dermal):	Not classified
Acute Toxicity (Inhalation):	Not classified
LD50 and LC50 Data:	Not available
Skin Corrosion/Irritation:	Causes skin irritation.
pH:	9.0 - 10.5
Eye Damage/Irritation:	Causes serious eye irritation.
Respiratory or Skin Sensitization:	Not classified
Germ Cell Mutagenicity:	Not classified

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350 mg/kg

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Carcinogenicity:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, NTP or OSHA
Specific Target Organ Toxicity (Repeated Exposure):	Not classified
Reproductive Toxicity:	Not classified
Specific Target Organ Toxicity (Single Exposure):	Not classified
Aspiration Hazard:	Not classified
Symptoms/Injuries After Inhalation:	Prolonged exposure may cause irritation.
Symptoms/Injuries After Skin Contact:	Redness, pain, swelling, itching, burning, dryness, and dermatitis.
Symptoms/Injuries After Eye Contact:	Contact causes severe irritation with redness and swelling of the conjunctiva.
Symptoms/Injuries After Ingestion:	Ingestion may cause adverse effects.
<b>Chronic Symptoms:</b>	
11.2. Information on Toxicological Effects - Ingredient(s)	
LD50 and LC50 Data:	

## Section 12 – ECOLOGICAL INFORMATION

Ammonium hydroxide (1336-21-6)

### 12.1. Toxicity

LD50 Oral Rat

**Ecology - General:** Component(s) of this mixture are categorized as harmful to aquatic life with long lasting effects.

Ammonium hydroxide (1336-21-6)	
LC50 Fish 1	8.2 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50 Daphnia 1	0.66 mg/l (Exposure time: 48 h - Species: water flea)
EC50 Daphnia 2	0.66 mg/l (Exposure time: 48 h - Species: Daphnia pulex)
NOEC Chronic Crustacea	3.47 mg/l

## 12.2. Persistence and Degradability

May cause long-term adverse effects in the environment.

#### 12.3. Bioaccumulative Potential

Not established

#### 12.4. Mobility in Soil

Not available

#### 12.5. Other Adverse Effects

**Other Information:** Avoid release to the environment

### Section 13 – DISPOSAL CONSIDERATIONS

## 13.1. Waste Treatment Methods

13.1. Waste Treatment Methods	15.1. Waste Treatment Methods	
Waste Disposal Recommendations:	Dispose in accordance with all federal, state, provincial, and local regulations. This material does not meet the criteria of a hazardous waste as a defined under the Resource Conservation and Recovery Act (RCRA) 40 CRF 261.	
Additional Information:	Container may remain hazardous when empty. Continue to observe all precautions.	



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**Ecology - Waste Materials:** Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

Section 14 – TRANSPORT INFORMATION	
US DOT Shipping Name:	Not regulated for transport
Hazard Class:	Not regulated for transport
IATA (International Air Transport Association):	Not regulated for transport
IMO (International Maritime Organization):	Not regulated for transport

## **Section 15 – REGULATORY INFORMATION**

#### 15.1. US Federal Regulations:

Hydrogen Peroxide Indicating Ink		
SARA Section 311/312 Hazard Classes	Health hazard - Skin corrosion or Irritation	
	Health hazard - Serious eye damage or eye irritation	
Ammonium hydroxide (1336-21-6)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
CERCLA RQ	1000 lb	
Water (7732-18-5)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		

### 15.2. US State Regulations:

### Ammonium hydroxide (1336-21-6)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List

## 15.3. International Regulations:

Ammonium hydroxide (1336-21-6)	
Listed on the Canadian DSL (Domestic Substances List)	
Water (7732-18-5)	
Listed on the Canadian DSL (Domestic Substances List)	

Section 16 – OTHER INFORMATION		
Date of Preparation or Latest Revision:	June 25, 2021	
Other Information:	This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17	



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GHS Full Text Phrases:	Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4	
	Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1	
	Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2	
	Corr. Met. 1	Corrosive to Metals Category 1	
	Eye Dam. 1	Serious eye damage/eye irritation Category 1	
	Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A	
	Skin Corr. 1B	Skin corrosion/irritation Category 1B	
	Skin Irrit. 2	Skin corrosion/irritation Category 2	
	STOT SE 3	Specific target organ toxicity (single exposure) Category 3	
	H290	May be corrosive to metals	
	H302	Harmful if swallowed	
	H314	Causes severe skin burns and eye damage	
	H315	Causes skin irritation	
	H318	Causes serious eye damage	
	H319	Causes serious eye irritation	
	H335	May cause respiratory irritation	
	H400	Very toxic to aquatic life	
	H411	Toxic to aquatic life with long lasting effects	
	True Indicating does not validate ink for every possible substrate/ink combination or printing		
	process/equipment. True Indicating shall not be held liable for any loss, costs, damages as a result		
	from the use of said ink. True Indicating warrants to the original purchaser that the ink is free from		
Warranty:			
viarranty.	defective, True Indicating will exchange the defective ink or refund the purchase price as True		
	Indicating determines. There are no other expressed or implied warranty, and no implied warranty of		
	merchantability and no implied warranty for a particular purpose.		
This Safety Data Sheet has been created using data from sources considered technically reliable. It does not constitute a warranty as to the			

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