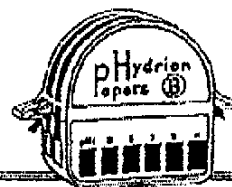


MICRO ESSENTIAL LABORATORY INC.

MANUFACTURERS OF HYDRION pH PAPERS AND HYDRION pH BUFFERS



4224 AVENUE H

• BROOKLYN

• NEW YORK 11210

• 718-338-3618-9

MATERIAL SAFETY DATA SHEET

Essentially Similar to U.S. Department of Labor Form OSHA--174 SEPT. 1985

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Section I — Product Information

EMERGENCY TELEPHONE - 718-338-3618

DATE PREPARED -

MARCH 15, 2003

TELEPHONE NUMBER FOR INFORMATION - 718-338-3618

TRADE NAME: HYDRION INDICATOR SOLUTIONS / HYDRION COLOR KEY BUFFER PRESERVATIVE

CHEMICAL NAME & SYNONYMS: pH INDICATOR SOLUTIONS

CHEMICAL FAMILY: SULFONPHTHALEIN INDICATORS

FORMULA

N/A

CAS NUMBER

REFER BELOW

FORMULA WEIGHT

N/A

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
WATER	NONE			
ISOPROPYL ALCOHOL CAS# 67-63-0	400 PPM			
POLYETHYLENE GLYCOL CAS# 25322-68-3	NONE ESTABLISHED			
3-3'DIBROMOTHYMOLSULFONPHTHALEIN CAS# 76-59-5	NONE ESTABLISHED			
2{ [4-(DIMETHYLAMINO)PHENYL] AZO} BENZOIC ACID CAS# 845-10-3	NONE ESTABLISHED			
THYMOLSULFONPHTHALEIN CAS# 81012-93-3	NONE ESTABLISHED			
METHYL p-HYDROXY BENZOATE CAS# 99-76-3				LD ₅₀ 8000 mg/kg bw MOUSE

Section III — Physical/Chemical Characteristics

Boiling Point	NO PHYSICAL DATA AVAILABLE	Specific Gravity (H ₂ O=1)	1.015 AT 20/20°C
Vapor Pressure (mm Hg.)	N/A	Melting Point	N/A
Vapor Density (AIR=1)	> 1	Evaporation Rate (Butyl Acetate=1)	LESS THAN 1
Solubility in Water	VERY GOOD		

Section IV — Fire and Explosion Hazard Data NFPA RATING H - 1 F - 1 S - 0

Flash Point (Method Used) ESSENTIALLY NON-FLAMMABLE 1 Flammable Limits N/A LEL N/A UEL N/A

Extinguishing Media USE CO₂, DRY CHEMICALS, ALCOHOL TYPE OR UNIVERSAL TYPE FOAMS APPLIED BY MANUFACTURERS RECOMMENDED TECHNIQUES.

Special Fire Fighting Procedures USE SELF CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING. DO NOT DIRECT SOLID STREAM OF WATER OR FOAM INTO HOT, BURNING POOLS, THIS MAY CAUSE FROTHING AND INCREASE INTENSITY.

Unusual Fire and Explosion Hazards CAN EMIT TOXIC FUMES UNDER FIRE. VAPORS MAY FORM FROM THIS PRODUCT AND MAY TRAVEL OR BE MOVED AIR CURRENTS AND BE IGNITED BY PILOT LIGHTS AND OTHER SIMILAR OF ELECTRICAL SOURCES.

Section V — Reactivity Data

Stability Unstable Conditions to Avoid HEAT, SPARKS AND FLAMES.

Stable XX PRODUCT IS STABLE.

Incompatibility (Materials to Avoid) AVOID STRONG BASES, STRONG ACIDS, STRONG OXIDIZERS, ALDEHYDES, HALOGENS AND HALOGEN COMPOUNDS.

Hazardous Decomposition or Byproducts MIGHT DECOMPOSE BY ABOVE CONDITIONS AND FORM TOXIC FUMES.

Hazardous Polymerization May Occur Conditions to Avoid NONE.

Will Not Occur XXXX

Section VI — Health Hazard Data

SYMPTOMS OF OVEREXPOSURE for each potential route of exposure. **

Inhaled: MAY CAUSE MILD IRRITATION TO THE NOSE AND THROAT.

Contact with skin or eyes: MAY CAUSE IRRITATION

Absorbed through skin: MAY BE HARMFUL BY EXPOSURE OF LARGE QUANTITIES.

Swallowed: TOXIC. INGESTION IN LARGE QUANTITIES MAY CAUSE DROWSINESS AND LOSS OF CONSCIOUSNESS, STOMACH CRAMPS, PAIN, NAUSEA, VOMITING AND DIARRHEA MAY OCCUR.

HEALTH EFFECTS OR RISKS FROM EXPOSURE. Explain in lay terms. Attach extra page if more space is needed.

Acute: SEE ABOVE INFORMATION.

** TO THE BEST OF OUR KNOWLEDGE THE CHEMICAL, PHYSICAL AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED FOR ALL THE CHEMICALS IN OUR SOLUTION.

Chronic: PROLONGED SKIN CONTACT WITH LARGE AMOUNTS OF SOLUTION COULD CAUSE IRRITATION OR ALLERGIC REACTION.

Carcinogenicity: NTP? NO DATA HAS BEEN ESTABLISHED

IARC Monographs? N/A

Osha Regulated? N/A

FIRST AID: EMERGENCY PROCEDURES GET MEDICAL ASSISTANCE IF ANY ADVERSE EFFECTS SHOULD DEVELOPE

Eye Contact: IMMEDIATELY FLUSH EYES WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES.

Skin Contact: IMMEDIATELY FLUSH SKIN WITH WATER AND WASH WITH SOAP AND LARGE AMOUNTS OF WATER.

Inhaled: REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT GIVE OXYGEN. CALL A PHYSICIAN.

Swallowed: IF CONSCIOUS INDUCE VOMITING AND CALL A PHYSICIAN.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
SEE ABOVE HEALTH INFORMATION.

Section VII -- Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

SMALL SPILLS SHOULD BE FLUSHED WITH LARGE AMOUNTS OF WATER. LARGER SPILLS SHOULD BE COLLECTED FOR DISPOSAL.

Water Disposal Method

INCINERATE IN A CHEMICAL INCINERATOR EQUIPPED WITH A AFTERBURNER AND SCRUBBER FOR DISPOSAL OF LARGE AMOUNTS OF SOLUTION.

NOTE: Dispose of all wastes in accordance with federal, state and local regulations.

Precautions to Be Taken in Handling and Storing

STORE IN COOL, DRY AREAS AT CONTROLLED ROOM TEMPERATURES. AVOID HIGH TEMPERATURES AND FREEZING TEMPERATURES.

Other Precautions

DO NOT GET INTO EYES, ON SKIN OR ON CLOTHING. WASH THOROUGHLY AFTER HANDLING.

VII -- SPECIAL HANDLING INFORMATION

Ventilation and engineering controls LOCAL EXHAUST OR GENERAL MECHANICAL ROOM VENTILATION IS EXPECTED TO BE SATISFACTORY.

Respiratory protection (type) NONE EXPECTED TO BE NEEDED.

Eye protection (type) SAFETY GLASSES.

Gloves (specify material) PVC - COATED (ESPECIALLY FOR BULK SOLUTION HANDLING)

Other clothing and equipment EYE BATH AND SAFETY SHOWER (FOR BULK SOLUTION HANDLING)

Work practices, hygienic practices DO NOT GET INTO EYES. AVOID PROLONGED OR REPEATED SKIN CONTACT. WASH WITH SOAP AND WATER AFTER USE. DO NOT TAKE INTERNALLY.

Other handling and storage requirements STORE AT CONTROLLED ROOM TEMPERATURES AND AT DRY LOCATIONS.

Protective measures during maintenance of contaminated equipment. WEAR FULL COVER CLOTHING, GOGGLES AND GLOVES WHEN EXPOSED TO BULK SOLUTION HANDLING.

**** NOTE: N/A = NOT APPLICABLE OR NOT AVAILABLE.

The data in this Material Safety Data Sheet relates only to the material designated herein and does not relate to use in combination with any other material that is not supplied by Micro Essential Laboratory as a buffer salt. The statements contained herein are offered for informational purposes only and is based on technical data that Micro Essential Laboratory believes to be reliable. The information and data are intended to be followed only by persons with technical skills and at their own discretion and risk. Since conditions are outside our control, we make no warranties, express or implied and assume no liability in connection with any use of this information. We reserve the right to revise this safety sheet from time to time.