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MICRO ESSENTIAL LABORATORY INC.
MANUFACTURERS OF HYDRION PH PAPERS AND HYDRION PH BUFFERS
4224 AVENUE H BROOKLYN NEW YORK 11210 718-338-3618-9

SAFETY INFORMATION
ON
HYDRION INDICATOR SOLUTIONS

HYDRION INDICATOR SOLUTIONS ARE ESSENTIALLY CLASSIFIED AS NON-HAZARDOUS MATERIALS UNDER OSHA REGULATIONS WHEN USED ACCORDING TO OUR DIRECTIONS.

HYDRION INDICATOR SOLUTIONS ARE MANUFACTURED AND FORMULATED FOR LABORATORY USE ONLY AND REQUIRE NO SPECIAL HANDLING, LABELLING OR MARKINGS. HYDRION INDICATOR SOLUTIONS ARE NOT TO BE TAKEN INTERNALLY.

OUR INDICATOR SOLUTIONS ARE SAFE FOR SHIPMENT BY AIR, SEA OR GROUND TRANSPORTATION.

OUR HYDRION INDICATOR SOLUTIONS CONSISTS OF INDICATOR DYES OF THE SULFONPHTHALEIN GROUP THAT HAVE BEEN DISSOLVED IN SOLVENTS. THESE SOLUTIONS ARE TO BE USED IN VITRO ONLY!! THE CONCENTRATION OF DISSOLVED DYE IS VERY SMALL. THIS PRODUCT CONSIST OF STABLE, NON-REACTIVE MATERIALS. THEY ARE NON-VOLATILE AND NOT RADIOACTIVE. THESE SOLUTIONS CAN BE DISCARDED ACCORDING TO LOCAL, STATE AND FEDERAL ENVIRONMENTAL PROCEDURES AND REGULATIONS.

HYDRION INDICATOR SOLUTIONS SHOULD BE STORED AT CONTROLLED ROOM TEMPERATURE AND AT DRY LOCATIONS. PROTECT SOLUTIONS FROM SUNLIGHT.

ATTACHED PLEASE FIND MATERIAL SAFETY DATA INFORMATION FOR OUR HYDRION INDICATOR SOLUTIONS (SIMILAR TO OSHA FORM 174). THESE SOLUTIONS ARE ESSENTIALLY NON-HAZARDOUS WHEN USED ACCORDING TO OUR INSTRUCTIONS. KINDLY REFER TO THE ATTACHED SHEETS FOR ALL HANDLING, SAFETY AND DISPOSAL REQUIREMENTS BEFORE USING OUR INDICATOR SOLUTIONS.

SECTION I - PRODUCT INFORMATION

EMERGENCY TELEPHONE NUMBER: 718-338-3618 DATE PREPARED: OCT 1ST, 1991

TELEPHONE NUMBER FOR INFORMATION: 718-338-3618

TRADE NAME: HYDRION INDICATOR SOLUTIONS

CHEMICAL NAME & SYNONYMS: PH INDICATOR SOLUTIONS

CHEMICAL FAMILY: SULFONPHTHALEIN INDICATORS

FORMULA	N/A	CAS NUMBER	FORMULA	N/A
		REFER BELOW		

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENTS (SPECIFIC CHEMICAL IDENTITY; COMMON NAME(S))	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED	% (OPTIONAL)
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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	

SECTION III- PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: NO PHYSICAL DATA AVAILABLE

VAPOR PRESSURE (MMHG): N/A

VAPOR DENSITY (AIR=1): > 1
SOLUBILITY IN WATER: VERY GOOD
APPEARANCE AND ODOR: GREEN TO RED SOLUTIONS, MILD ODOR
SPECIFIC GRAVITY(H2O=1): 1.015 AT 20/20 C
MELTING POINT: N/A
EVAPORATION RATE (BUTYL ACETATE=1): LESS THAN 1

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: ESSENTIALLY NON-FLAMMABLE FLAMMABLE LIMITS: 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 IG-
NITED BY PILOT LIGHTS AND OTHER SIMILAR OR ELECTRICAL SOURCES.

SECTION V - REACTIVITY DATA

STABILITY: STABLE
CONDITIONS TO AVOID: HEAT. SPARKS AND FLAMES.

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: WILL NOT OCCUR
CONDITIONS TO AVOID: NONE.

SECTION VI - HEALTH HAZARD DATA

SYMPTOMS OF OVEREXPOSURE FOR EACH POTENTIAL ROUTE OF EXPOSURE.

INHALED: MAY CAUSE IRRITATION TO THE NOSE AND THROAT.

CONTACT WITH SKIN OR EYES: MAY CAUSE IRRITATION AND BURNS.

ABSORBED THROUGH SKIN: MAY BE HARMFUL BY EXPOSURE OF LARGE QUANTITIES.

SWALLOWED: 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.**TO THE BEST OF OUR KNOWLEDGE THE CHEMICAL,
**ACUTE: SEE ABOVE INFORMATION PHYSICAL & TOXICOLOGICAL PROPERTIES HAVE NOT
** CHRONIC:PROLONGED SKIN CONTACT W/ BEEN THOROUGHLY INVESTIATED FOR ALL THE
LARGE AMOUNTS OF SOLUTION COULD CAUSE CHEMICALS IN OUR SOLUTION.
SKIN IRRITATION OR ALLERGIC REACTION.

** CARCINOGENICITY:	NTP?	IARC MONOGRAPHS?	OSHA REGULATED?
NO DATA HAS BEEN ESTABLISHED		N/A	N/A

FIRST AID:

EMERGENCY PROCEDURES: GET MEDICAL ASSISTANCE FOR IF ANY ADVERSE EFFECTS SHOULD
DEVELOP.

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 (SPECIAL 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 ROOM TEMPERATURE AT DRY LOCATIONS. DOT - REGULATED.

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 RELATES 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.