

SARGENT WELCH SCIENTIFIC CO.
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MATERIAL SAFETY DATA SHEET
PRODUCT NO. U3852
C15630-100ML,-500ML,-001LT
6/2/88

CHEMTREC 800-424-9300
DAY (312) 468-3700

24 HOUR EMERGENCY ASSISTANCE

SECTION I IDENTIFICATION

PRODUCT UNIVERSAL INDICATOR SOLUTION
TRADE/CHEMICAL
SYNONYMS

FORMULA SEE SECTION II
RTECS# ALL
C.A.S.# SEE SECTION II

HEALTH 3

FLAMMABILITY 3

REACTIVITY 0

HAZARD RATING

LEAST SLIGHT MODERATE HIGH EXTREME
0 1 2 3 4

SECTION II MIXTURE COMPONENTS

COMPONENT	CAS NUMBER	%	TLV
METHYL RED	CAS #493-52-7	0.05	NE
BROMOTHYMOLO BLUE	CAS #34722-90-2	0.03	NE
METHYL ALCOHOL	CAS #67-56-1	99.7	200 PPM TWA
THYMOLO BLUE	CAS #62625-21-1	0.1	NE
PHENOLPHTHALEIN	CAS #77-09-8	0.06	NE

NA=NOT APPLICABLE

NE= NONE ESTABLISHED

SECTION III PHYSICAL CHARACTERISTICS INFORMATION

MELTING POINT C 98 C SPECIFIC GRAVITY (H2O=1) 0.8
BOILING POINT C 65 C PERCENT VOLATILE BY VOLUME (%) 99.7
VAPOR PRESSURE MM HG/C 97 @ 20 C EVAPORATION RATE (BUTYL ACETATE=1) 5.9
VAPOR DENSITY (AIR=1) 1.1 SOLUBILITY IN WATER NA
APPEARANCE AND ODOR YELLOW-GREEN SOLUTION, METHYL ALCOHOL ODOR.

SECTION IV FIRE/EXPLOSION HAZARD INFORMATION

FLASH POINT C 11 C (52F) CLOSED CUP
FLAMMABLE LIMITS IN AIR % BY VOLUME LOWER: 6.7 UPPER: 36
FIRE EXTINGUISHER TYPE WATER SPRAY, DRY CHEMICAL, ALCOHOL FOAM, OR CARBON DIOXIDE.

FIRE FIGHTING PROCEDURES (CALL FIRE DEPT. IMMEDIATELY) IN THE EVENT OF A FIRE, WEAR FULL PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE. WATER MAY BE USED TO DILUTE AND COOL.

FIRE/EXPLOSION HAZARDS FLAMMABLE! AUTOIGNITION TEMPERATURE 385 C. ABOVE FLASH POINT, VAPOR-AIR MIXTURES ARE EXPLOSIVE WITHIN FLAMMABLE LIMITS NOTED ABOVE. VAPORS CAN FLOW ALONG SURFACES TO DISTANT IGNITION SOURCE AND FLASH BACK.

D.O.T. FLAMMABLE LIQUID N.O.S. UN1993

D.O.T. REGULATIONS MAY CHANGE FROM TIME TO TIME. PLEASE CONSULT THE MOST RECENT D.O.T. REGULATIONS. ESSENTIALLY SIMILAR TO FORM OSHA-174.

Universal Indicator Solution

VENTILATION LOCAL EXHAUST X
MECHANICAL (GENERAL) X
PROTECTIVE GLOVES VINYL OR RUBBER EYE PROTECTION GOGGLES
OTHER PROTECTIVE
EQUIPMENT LAB COAT

SECTION IX ADDITIONAL INFORMATION

STORE IN A COOL WELL VENTILATED PLACE.

CONDITIONS AGGRAVATED/TARGET ORGANS: PERSONS WITH PREEXISTING SKIN, EYE, RESPIRATORY, OR KIDNEY/LIVER DISORDERS MAY BE MORE SUSCEPTIBLE.

REV NO 2 DATE 6/2/88 APPROVED K. KUCHEL SAFETY DIR. RMC

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SECTION V HEALTH HAZARD INFORMATION

THRESHOLD LIMIT VALUE (TLV) SEE SECTION II

OVEREXPOSURE SYMPTOMS (WHEN IN DOUBT CALL A PHYSICIAN OR LOCAL POISON CONTROL CENTER) TOXIC. ABSORBED THRU SKIN. ACUTE: IRRITATION TO SKIN, EYES, LUNGS, MUCOUS MEMBRANES AND GI TRACT. NAUSEA, HEADACHE, DIZZINESS, CNS DEPRESSION, VISION IMPAIRMENT, STAINS SKIN. CHRONIC: BLINDNESS, DERMATITIS, LIVER/KIDNEY DAMAGE.

EMERGENCY AND FIRST AID PROCEDURES

SKIN: REMOVE ANY CONTAMINATED CLOTHING. WASH SKIN WITH SOAP OR MILD DETERGENT AND WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS OR PERSISTS. EYES: WASH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES, LIFTING LOWER AND UPPER EYELIDS OCCASIONALLY. GET MEDICAL ATTENTION IMMEDIATELY. INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN. INGESTION: IF SWALLOWED, INDUCE VOMITING IMMEDIATELY BY GIVING TWO GLASSES OF WATER AND STICKING FINGER DOWN THROAT. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. CALL A PHYSICIAN IMMEDIATELY.

SECTION VI REACTIVITY INFORMATION

STABILITY	STABLE	CONDITIONS TO AVOID	AVOID HEAT AND IGNITION SOURCES.
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INCOMPATIBILITIES (MATERIALS TO AVOID) STRONG OXIDIZING AGENTS, ALUMINUM, SULFURIC ACIDS.

HAZARDOUS

DECOMPOSITION PRODUCTS CARBON OXIDES, FORMALDEHYDE.

HAZARDOUS POLYMERIZATION WILL NOT OCCUR
CONDITIONS TO AVOID NONE

SECTION VII SPILL CLEANUP / DISPOSAL INFORMATION

CLEANUP METHOD(S) CLEANUP/DISPOSAL METHODS ARE RECOMMENDATIONS ONLY. CHECK YOUR LOCAL, STATE, AND FEDERAL REGULATIONS.

VENTILATE AREA OF LEAK OR SPILL. REMOVE ALL SOURCES OF IGNITION. CLEAN-UP PERSONNEL REQUIRE PROTECTIVE CLOTHING AND RESPIRATORY PROTECTION FROM VAPORS. SMALL SPILLS MAY BE ABSORBED ON PAPER TOWELS AND EVAPORATED IN A FUME HOOD. ALLOW ENOUGH TIME FOR FUMES TO CLEAR HOOD, THEN IGNITE PAPER IN A SUITABLE LOCATION AWAY FROM COMBUSTIBLE MATERIALS. CONTAIN AND RECOVER LIQUID WHEN POSSIBLE.

DISPOSAL METHOD(S) CAN BE LIQUID INCINERATED IN RCRA APPROVED COMBUSTION CHAMBER OR ABSORB WITH VERMICULITE, DRY SAND, EARTH, OR SIMILAR MATERIAL. SCOOP UP WITH NON-SPARKING TOOLS AND PLACE IN CLOSED CONTAINER, AND DISPOSE IN A RCRA APPROVED FACILITY. DO NOT FLUSH TO SEWER.

SECTION VIII PERSONAL PROTECTION RECOMMENDATIONS

RESPIRATORY PROTECTION (SPECIFY TYPE) ORGANIC CARTRIDGE OR SELF CONTAINED.