Product ID:E-58D EMULSIFIER MSDS Date:01/01/2001 FSC:6850 NIIN:01-264-0837 Kit Part:Y MSDS Number: CKTFP === Responsible Party === Company Name:MET-L-CHEK COMPANY Address:1639 EUCLID ST **City:SANTA MONICA** State:CA ZIP:90404-3770 Country:US Info Phone Num:310-450-1111 Emergency Phone Num:310-450-1111 Chemtr ec Ind/Phone:(800)424-9300 CAGE:98733 === Contractor Identification === Company Name:MET-L-CHEK COMPANY Address:1639 EUCLID ST Box:00000 **City:SANTA MONICA** State:CA ZIP:90404 Country:US Phone:310-450-1111/FAX 310452-4046 Contract Num:SP0450-00-M-D492 CAGE:98733 Company Name: MET-L-CHEK COMPANY Address:1639 EUCLID ST Box:00000 **City:SANTA MONICA** State:CA ZIP:90404 Country:US Phone:310-450-1111/FAX 310452-4046 Contract Num:SP0450-01-M-ZB52 CAGE:98733 Company Name:MET-L-CHEK COMPANY Address:1639 EUCLI

D ST Box:00000 City:SANTA MONICA State:CA ZIP:90404 Country:US Phone:310-450-1111/FAX 310452-4046 Contract Num:SP0450-02-M-M049 CAGE:98733

Ingred Name:ETHYLENE GLYCOL (BULK, 55GAL.) CAS:107-21-1 RTECS #:KW2975000 Minumum % Wt:65. Maxumum % Wt:80. ACGIH STEL:C127 MG/M3;C50 PPM EPA Rpt Qty:1 LB DOT Rpt Qty:1 LB

Reports of Carcinogenicity:NTP:NO IARC:NO OS HA:NO

Health Hazards Acute and Chronic:TARGET ORGANS: KIDNEY, LIVER. EYE CONTACT: LIQUID MAY CAUSE IRRITATION, REDNESS, TEARING, STINGING AND SWELLING OF EYES. SKIN CONTACT: MAY CAUSE IRRITATION WITH PROLONGED OR REPEATED CONTACT. SYMPTOMS MAY INCLUDE REDNESS AND BURNING OF SKIN. SWALLOWING:SMALL AMOUNTS MAY NOT PRODUCE HARMFUL EFFECTS. LARGE AMOUNTS MAY BE HARMFUL. INHALATION: SMALL AMOUNTS MAY NOT BE HARMFUL. LARGE AMOUNTS MAY BE HAR MFUL.

Explanation of Carcinogenicity

THIS MATERIAL IS NOT KNOWN TO CONTAIN

ANY CONSTITUENTS LISTED AS A CARCINOGEN BY THE INTERNATIONAL AGENCY FOR RESEARCH FOR CANCER, THE NATIONAL TOXICOLOGY PROGRAM, OR OSHA. Effects of Overexposure:STOMACH OR INTESTINAL UPSET (NAUSEA, VOMITING,

DIARRHEA), IRRITATION (NOSE, THROAT, AIRWAYS), CENTRAL NERVOUS

SYSTEM DEPRESSION (DIZZINESS, FATIGUE, HEADACHE, UNCONSCIOUSNESS).

Medical Cond Aggravated by Exposure:OVER EXPOSURE TO COMPONENTS OF THIS MATERIAL CAN EFFECT KIDNEYS AND L

	First Aid Measures	
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First Aid:EYES: FLUSH WITH CLEAN WATER FOR 15 MINUTES. HOLD EYELIDS OPEN. SEEK MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. WASH EXPOSED AREA WITH SOAP AND WATER. IF SYMPTOMS PERSIST, SEEK MEDICAL ATT ENTION. LAUNDER CLOTHING AND CLEAN SHOES BEFORE REUSE. SWALLOWING: CALL PHYSICIAN IMMEDIATELY. IF INDIVIDUAL IS DROWSY OR UNCONSCIOUS, DO NOT GIVE ANYTHING BY MOUTH; PLACE INDIVIDUAL ON TH

EIR LEFT SID E WITH HEAD DOWN. DO NOT LEAVE INDIVIDUAL UNATTENDED. INHALATION: MOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. GET MEDICAL ATTENTION IMME DIATELY.

Flash Point Method:TCC Flash Point:=111.1C, 232.F Autoignition Temp:=397.7C, 747.9F Lower Limits:3.2 Upper Limits:15.3 Extinguishing Media:DRY CHEMICAL, WATER FOG, FOAM, OR CARBON DIOXIDE. Fire F ighting Procedures:WATER MAY BE INEFFECTIVE. WATER SPRAY MAY BE USED TO KEEP FIRE EXPOSED CONTAINERS COOL. WEAR FULL PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE PIECE OPERATE D IN THE PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE.

Unusual Fire/Explosion Hazard: EMPTY CONTAINERS MAY CONTAIN VAPORS.

Spill Release Procedures: VENTILATE AREA. REMOVE ALL SOURCES OF IG

NITION. ISOLATE AREA. WEAR PROTECTIVE GEAR, KEEP UNNECESSARY PERSONNEL AWAY. CONTAIN AND RECOVER LIQUID WHEN POSSIBLE. COLLECT LIQUID IN AN APPROPRIATE CONTAINE R OR ABSORB WITH AN INERT MATERIAL SUCH AS VERMICULITE, DRY SAND, OR EARTH; DO NOT USE COMBUSTIBLE MATERIALS, AND PLACE IN A CHEMICAL WASTE CONTAINER. DO NOT FLUSH TO SEWER!

Handling and Storage Precautions: PROTECT AGAINST PHYSICAL DAMAGE. STORE

IN A COOL, DRY WELL-VENTILATED LOCATION, AWAY FROM AREAS WHERE FIRE HAZARD MAY EXIST. STORE AND USE IN NO SMOKING AREA. EMPTY CONTAINERS MAY CONTAIN RESIDUE LIQU ID AND VAPOR. Other Precautions: ANY USE OF THIS PRODUCT IN ELEVATED TEMPERATURE PROCESSING SHOULD BE THOROUGHLY EVALUATED TO ESTABLISH AND MAINTAIN SAFE OPERATING CONDITIONS.

Respiratory Protection: PERSONAL RESPIRATORS (NIOSH APPROVED) IF EXPOSURE

LIMIT IS EXCEEDED.

Ventilation:SYSTEM OF LOCAL OR GENERAL EXHAUST RECOMMENDED TO KEEP EXPOSURE BELOW AIRBORNE EXPOSURE LIMITS. LOCAL EXHAUST IS PREFERRED TO CONTROL EMMISION AT ITS SOURCE.

Protective Gloves:WEAR RESISTANT GLOVES.

Eye Protection: CHEMICAL SPLASH GOGGLES, SAFETY GLASSES OR FULL FACE SHIELD.

Other Protective Equipment: EYE WASH AND QUICK-DRENCH FACILITIES SHOULD BE NEAR WORK AREA. TO PREVENT REPEATED OR PROLONGED SKIN CONTACT, WEAR IMPERVIOUS CLOTHING AND BOOTS.

Supplemental Safety and Health

THIS ENTRY, MSDS SERIAL #CKTFP, DESCRIBES THE E-58 D EMULSIFIER, PART2 OF A TWO PART KIT. SEE THIS SAME NSN FOR FLUORESCENT PENETRANT FP-95A(M), SERIAL # CKTFL, FOR PART ONE DATA.

HCC:V4 Spec Gravity:1.12 @ 60F (9.3 LBS/GAL) VOC Grams/Liter:9.3 Solubility in Water:100% Appearance and Odor:PINKISH RED LIQUID; MILD ODOR.

Stability Indicator/Materials to Avoid:YES AVOID STRONG ACIDS, ALKALIES, AND OXIDIZING AGENTS. Stability Condition to Avoid:STABLE UNDER ORDINARY CONDITIONS OF USE AND STORAGE.

Hazardous Decomposition Products:MAY FORM CARBON DIOXIDE AND CARBON MONOXIDE AS PRODUCTS OF COMBUSTION.

Conditions to Avoid Polymerization: WILL NOT OCCUR.

Toxicological Information: THIS MATERIAL IS NOT KNOWN TO CONTAIN ANY CONSTITUENTS LIST

ED AS A CARCINOGEN BY THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER, THE NATIONAL TOXICOLOGY PROGRAM, OR OSHA. OSHA EXPOSURE LIMITS (VPEL): 50 PPM. ACGIH THRESHOLD LIMIT (TLV): 100 MG/M3.

Ecological:NO DATA AVAILABLE ON PRODUCT.

Waste Disposal Methods: PROCESSING, USE OR CONTAMINATION OF THIS PRODUCT MAY CHANGE THE WASTE MANAGEMENT OPTIONS

. STATE AND LOCAL DISPOSAL REGULATIONS MAY DIFFER FROM FEDERAL REGULATIONS. DISPOSE OF CONTAINER AND UNUSED CONT ENTS IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REQUIREMENTS.

Transport Information:DOT INFORMATION- 49 CFR 172.101: PSN: OTHER REGULATED SUBSTANCES, LIQUID, N.O.S.; CLASS 9; NA 3082 ; PG I I I. REPORTABLE QUANTITY- 49 CFR 172.101: 5000 LBS. ETHYLENE GLYCOL. (HMIS: THIS ITEM DOES NOT MEET
THE DEFINITION OF A "HAZARDOUS SUBSTANCE" BASED ON 49 CFR 171.8, AND IN 55 GAL DRUMS (512 LBS), AND RQ FOR ETHYLENE GLYCOL= 5,000 LBS. THIS ITEM IS NOT REGULATED FOR TRANSPORTATION.)

SARA Title III Information:SARA 302 COMPONENTS- 40 CFR 355 APPENDIX A: NONE. SECTION 311/312 HAZARD CLASS-40 CFR370.2: IMMEDIATE, DELAYED. SARA 313 COMPONENTS- 40 CFR 372.65: ETHYLENE GLYCOL, CAS # 107-21-1,