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 Chemt rec 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 EUCL

ID 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 O SHA: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 Carcinogenicit

y: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 LIVER.

	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 T

HEIR 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 Fighting 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

GNITION. 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 EXPOSUR

E 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.

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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 LIS

TED 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 OPTION

S. 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,