

## **958 LOW RESIDUE SOLDERING FLUX**

### **MSDS Number**

CKXDX

### **National Stock Number**

-

### **Product Name**

958 LOW RESIDUE SOLDERING FLUX

### **Manufacturer**

KESTER SOLDER DIV OF LITTON SYSTEMS INC

### **Product Identification**

Product ID:958 LOW RESIDUE SOLDERING FLUX

MSDS Date:10/15/1996

FSC:NIIN:Submitter:N EN

Status Code:A

MSDS Number: CKXDX

### **Responsible Party**

KESTER SOLDER DIVISION OF LITTON SYSTEMS, INC.

515 E. TOUHY AVENUE

DES PLAINES , IL 60018

US

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Preparer: D. BEMIER

Cage: TO708

### **Contractor**

KESTER SOLDER DIVISION OF LITTON SYSTEMS, INC.

DES PLAINES, IL 60018

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### **Ingredients**

2-PROPANOL

CAS: 67-63-0

RTECS: NT8050000

OSHA PEL400 PPM

BUTYL ACETATE

CAS: 123-86-4

RTECS: AF7350000

OSHA PEL150 PPM

EPA Report Quantity: 5000 LBS

DOT Report Quantity: 5000 LBS

CARBOXYLIC ACIDS

CAS: 68937-68-8

RTECS: NX5071000

SURFACTANTS. (NON-HAZARDOUS INGREDIENT)

CAS: 9014-93-1

WATER. (NON-HAZARDOUS INGREDIENT)

CAS: 7732-18-5

RTECS: ZC0110000

## Hazards

LD50 LC50 Mixture:2-PROPANOL LD50 INGESTED 5.8 G/KG RABBIT

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:EXPOSURE LIMITS: NOT DETERMINED FOR THE PRODUCT. SEE (INGREDIENTS) SECTION FOR INGREDIENTS. PRIMARY EXPOSURE DURING SOLDERING IS TO EVAPORATED ALCOHOL SOLVENT CONTAINING A SMALL AMOUNT OF ORGANIC ACIDS. TARGET ORGANS: EYES, SKIN, MUCOUS MEMBRANES AND RESPIRATORY SYSTEM. EFFECTS OF ACUTE (SEVERE SHORT-TERM) EXPOSURE: INHALATION: FUMES DURING SOLDERING MAY IRRITATE MUCOUS MEMBRANES AND RESPIRATORY SYSTEM. HIGH CONCENTRATIONS CAN CAUSE HEADACHE, DIZZINESS, NARCOSIS AND NAUSEA. SKIN: LOCAL IRRITATION. SKIN ABSORPTION: NONE. EYE: IRRITATION FROM CONTACT WITH LIQUID AND SMOKE FROM SOLDERING. INGESTION: (SIGNS & SYMPTOMS OF OVEREXPOSURE)

Explanation of Carcinogenicity:NOT LISTED

Effects of Overexposure:HEALTH HAZARDS ACUTE AND CHRONIC (CONT): BURNING SENSATION IN THE DIGESTIVE TRACT. EFFECTS OF CHRONIC (PROLONGED) EXPOSURE: PROLONGED OR REPEATED SKIN CONTACT CAN RESULT IN A RASH. BREATHING VAPORS CAN RESULT IN HEADACHE AND IRRITATION TO THE MUCOUS MEMBRANES. SMOKE DURING SOLDERING CAN CAUSE RESPIRATORY SYSTEM IRRITATION AND DAMAGE. TERATOGENICITY / MUTAGENICITY: N/P.

Medical Condition Aggravated by Exposure:CHEMICAL HYPERSENSITIVITY, ASTHMA AND OTHER RESPIRATORY CONDITIONS. CONTINUED BREATHING OF HIGH CONCENTRATIONS OF ALCOHOL VAPORS CAN AFFECT THE LIVER AND CENTRAL NERVOUS SYSTEM.

## First Aid

First Aid:SEEK MEDICAL ASSISTANCE FOR FURTHER TREATMENT, OBSERVATION AND SUPPORT IF NEEDED. EYE CONTACT: FLUSH EYES WITH PLENTY OF WATER AND GET MEDICAL ATTENTION. SKIN CONTACT: WASH THOROUGHLY WITH SOAP AND WATER. CONTACT A PHYSICIAN. INHALATION: REMOVE VICTIM TO FRESH AIR. INGESTION: INDUCE VOMITING AND GET PROMPT MEDICAL ATTENTION.

## Fire Fighting

Flash Point Method:TOC

Flash Point:=-15.6C, 60.F

Autoignition Temp:=-398.9C, 750.F

Lower Limits:2.0

Upper Limits:12.0

Extinguishing Media:CARBON DIOXIDE, ALCOHOL FOAM AND DRY CHEMICAL.

Fire Fighting Procedures:USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS AND CONTROL VAPORS. USE NIOSH APPROVED SCBA AND FULL PROTECTIVE EQUIPMENT .

Unusual Fire/Explosion Hazard:A MODERATE EXPLOSION HAZARD EXISTS WHEN EXPOSED TO HEAT OR FLAMES. FLAMMABILITY: YES. CONDITION TO AVOID: NOT ESTABLISHED. EXPLOSION SENSITIVITY: IMPACT: NONE IDENTIFIES, STATIC DISCHARGE SENSITIVITY: YES. HAZARDOUS

COMBUSTION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE, ALIPHATIC ALDEHYDES AND ACIDS.

## Accidental Release

Spill Release Procedures: REMOVE ALL IGNITION SOURCES. PROVIDE ADEQUATE VENTILATION. ABSORBENTS, SUCH AS VERMICULITE, CAN BE USED TO SOAK UP THE SPILLED LIQUID OR FLUSH AWAY WITH PLENTY OF WATER.

## Handling

Handling and Storage Precautions: AVOID EYE AND SKIN CONTACT. AVOID PROLONGED OR REPEATED SKIN CONTACT. AVOID BREATHING SMOKE / FUMES GENERATED DURING SOLDERING. STORE AWAY FROM SOURCES OF IGNITION. STORE AT TEMPERATURES ABOVE 32F (0 C). OPEN CONTAINERS CAUTIOUSLY TO ALLOW VENTING OF ANY INTERNAL PRESSURE.

## Exposure Controls

Respiratory Protection: WHEN VENTILATION IS NOT SUFFICIENT TO REMOVE FUMES FROM THE BREATHING ZONE, A NIOSH APPROVED RESPIRATOR SHOULD BE WORN.

Ventilation: PROVIDE ADEQ EXHAUST VENT (GENERAL AND/OR LOCAL) IF NECESSARY TO MEET EXPOS REQ. LOCAL EXHAUST VENT IS PREFERRED TO MINIMIZE DISPERSION OF FUMES INTO WORK AREAS

Protective Gloves: PLASTIC OR RUBBER GLOVES WHERE NECESSARY TO AVOID SKIN CONTACT.

Eye Protection: ANSI APPROVED CHEMICAL SAFETY GOGGLES

Other Protective Equipment: IMPERMEABLE APRON WHEN SPLASHING IS LIKELY TO OCCUR. EYEWASH AND DELUGE SHOWER MEETING ANSI DESIGN CRITERIA .

Work Hygienic Practices: WASH HANDS THOROUGHLY BEFORE EATING OR SMOKING.

Supplemental Safety and Health

PHYSICAL / CHEMICAL PROPERTIES (CONT): PHYSICAL STATE AT 20 C: LIQUID.

FREEZING POINT (760 MM HG): NOT ESTABLISHED - F, NOT ESTABLISHED -

C. MELTING POINT: NOT APPLICABLE - F, NOT APPLICABLE - C. O DOR

THRESHOLD: 200 PPM FOR 2-PROPANOL. COEFFICIENT OF WATER / OIL

DISTRIBUTION: NOT ESTABLISHED.

## Chemical Properties

Boiling Pt: =82.2C, 180.F

B.P. Text: (760 MM HG)

Vapor Pres: 33 MM HG @ 20C

Vapor Density: 2.1, AIR=1

Spec Gravity: 0.806 (WATER = 1 @ 25C)

VOC Pounds/Gallon: 735

pH: 3.1 (5% SOLUTION)

Evaporation Rate & Reference: 1.7, (BUTYL ACETATE = 1)

Solubility in Water: 95% BY WEIGHT

Appearance and Odor: COLORLESS LIQUID WITH ALCOHOL ODOR.

Percent Volatiles by Volume: 97%

## Stability

Stability Indicator/Materials to Avoid: YES

STRONG OXIDIZING MATERIALS.

Stability Condition to Avoid: NOT ESTABLISHED.

Hazardous Decomposition Products: WHEN HEATED TO SOLDERING TEMPERATURES, THE SOLVENTS ARE EVAPORATED AND ORGANIC MATERIALS MAY BE THERMALLY DEGRADED TO LIBERATE ALIPHATIC ALDEHYDES AND ACIDS.

## Disposal

Waste Disposal Methods: ACCORDING TO LOCAL REGULATIONS, USUALLY BY INCINERATION. EPA HAZARDOUS WASTE NUMBER IS D001. HAZARD CLASS IS IGNITABLE WASTE. CAUTION: EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE. OBSERVE ALL LABEL PRECAUTIONS.

## Toxicology

Toxicological Information: 2-PROPANOL: LD50 INJECTED G/KG- 5.8 RABBIT, LC50 INHALED G/M3 - NE. BUTYL ACETATE: LD50 INJECTED G/KG - 13.1 RAT, LC50 INHALED G/M3- 2.0 RAT. CARBOXYLIC ACIDS: LD50 INJECTED G/KG - NE, LC50 INHALED G/M3 - NE. SURFACTANTS: LD50 INJECTED

G/KG - NE, LC50 INHALED G/M3 - NE.

## Other Information

Disclaimer (provided with this information by the compiling agencies):  
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## Transport

Transport Information:DOT: ISOPROANOL, UN 1219 FLAMMABLE LIQUID. TDG: PACKAGING GROUP II, CLASS 3.2.

## Regulatory

SARA Title III Information:THIS CHEMICAL IS SUBJECT TO THE REPORTING REQUIREMENT OF SECTION 313 OF TITLE III OF THE U.S.A. SUPERFUND AMENDMENT AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372: (NONE INDICATED - ).

Federal Regulatory Information:WHMIS: CLASS B, DIVISION 2; CLASS D, DIVISION 2, SUBDIVISION B.