

KESTER SOLDER DIVISION OF LITTON SYSTEMS, INC. -- 197, ROSIN SOLDERING FLUX, TYPE RMA
-- 3439-00-069-5815

===== Product Identification =====

Product ID:197, ROSIN SOLDERING FLUX, TYPE RMA

MSDS Date:11/01/1999

FSC:3439

NIIN:00-069-5815

Status Code:A

MSDS Number: CLFST

=== Responsible Party ===

Company Name:KESTER SOLDER DIVISION OF LITTON SYSTEMS, INC.

Address:515 E. TOUHY AVENUE

City:DES PLAINES

State:IL

ZIP:60018

Country:US

Info Phone Num:847-297-1600

Emergency Phone Num:800-424-9300

Resp. Party Other MSDS Num.:197

Preparer's Name:M. WISE

Chemtrec Ind/Phone:(800)424-9300

CAGE:75297

=== Contractor Identification ===

Company Name:CMAX INC

Address:6127 PERIMETER PKY

Box:11647

City:MONTGOMERY

State:AL

ZIP:36111

Country:US

Phone:334-613-0500/ FAX: 2922

Contract Num:SP0400-01-V-1706

CAGE:2Y223

Company Name:KESTER SOLDER COMPANY

Address:515 E. TOUHY AVENUE

Box:City:DES PLAINES

State:IL

ZIP:6

0018
Country:US
Phone:800-424-9300
CAGE:09185
Company Name:KESTER SOLDER DIVISION OF LITTON SYSTEMS, INC.
Address:515 E. TOUHY AVENUE
Box:City:DES PLAINES
State:IL
ZIP:60018
Country:US
Phone:847-297-1600
CAGE:75297
Company Name:SUPERIOR FLUX AND MFG CO
Address:6615 PARKLAND BLVD
City:OLON (FORMALLY CLEVELAND)
State:OH
ZIP:44139
Country:US
Phone:440-349-3000
CAGE:87618

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===== Composition/Information on Ingredients =====

Ingred Name:2-PROPANOL
CAS:67-63-0
RTECS #:NT8050000
= Wt
:56.
OSHA PEL:980 MG/M3;400 PPM
ACGIH TLV:983 MG/M3;400 PPM
ACGIH STEL:1230 MG/M3;500 PPM

Ingred Name:ROSIN
CAS:8050-09-7
RTECS #:VL0480000
= Wt:37.

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===== Hazards Identification =====

Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:ACUTE: INHALATION: FUMES DURING
SOLDERING MAY IRRITATE MUCOUS MEMBRANES AND RESPIRATORY SYSTEM.
HIGH CONCENTRATIONS CAN CAUSE HEA

DACHE, DIZZINESS, NARCOSIS, AND

NAUSEA. SKIN CONTACT: LOCAL IRRITATION. SKIN ABSORPTION: NONE. EYE CONTACT: IRRITATION FROM CONTACT WITH LIQUID AND SMOKE FROM SOLDERING. INGESTION: BURNING SENSATION IN THE DIGESTIVE TRACT. CHRONIC: PROLONGED OR REPEATED SKIN CONTACT CAN RESULT IN A RASH. BREATHING VAPORS CAN RESULT IN HEADACHE, DIZZINESS, NARCOSIS, AND IRRITATION OF THE MUCOUS MEMBRANES. SMOKE DURING SOLDERING WILL CONTAIN ROSIN WHICH IS AN ALLERGEN AND CAN CAUSE RE

SPIRATORY

SYSTEM IRRITATION AND DAMAGE.

Explanation of Carcinogenicity:NOT LISTED AS A CARCINOGEN.

Effects of Overexposure:INHALATION: IRRITATION HEADACHE, DIZZINESS, NARCOSIS, NAUSEA. SKIN: IRRITATION. EYES: IRRITATION. INGESTION: BURNING SENSATION IN THE DIGESTIVE TRACT.

Medical Cond Aggravated by Exposure:CHEMICAL HYPERSENSITIVITY, ASTHMA AND OTHER RESPIRATORY CONDITIONS.CONTINUED BREATHING HIGH CONC. OF ALCOHOL VAPORS CONTAINING ROSIN, AN ALLERGEN, CAN AFFECT LIVE

R AND CENTRAL NERVOUS SYSTEM.

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===== First Aid Measures =====

First Aid:EYE CONTACT: FLUSH WITH PLENTY OF WATER AND GET MEDICAL ATTENTION. REMOVE ROSIN FROM AROUND EYES WITH A DILUTE ETHANOL SOLUTION. SKIN CONTACT: WASH THOROUGHLY WITH SOAP AND WATER. INHALATION: REMOVE VI CTIM TO FRESH AIR. INGESTION: INDUCE VOMITING AND GET PROMPT MEDICAL ATTENTION. GENERAL: SEEK MEDICAL ASSISTANCE FOR FURTHER TREATMENT, OBSERVATION AND SUPPORT IF NEEDED.

D.

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===== Fire Fighting Measures =====

Flash Point Method:TOC

Flash Point:=18.3C, 65.F

Autoignition Temp:=398.9C, 750.F

Lower Limits:2.0

Upper Limits:12.0

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

Fire Fighting Procedures:USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS AND CONTROL VAPORS.

Unusual Fire/Explosion Hazard:A MODERATE EXPLOSION HAZARD EXISTS WHEN EXPOSED TO HEAT OR FLAMES. EXPLOSION SENSITIVITY: IMPACT - NONE IDENTIF

IED. STATIC DISCHARGE SENSITIVITY - YES.

===== Accidental Release Measures =====

Spill Release Procedures:REMOVE ALL IGNITION SOURCES. PROVIDE ADEQUATE VENTILATION. ABSORBANTS, SUCH AS VERMICULITE, CAN BE USED TO SOAK UP THE SPILLED LIQUID. CLEAN UP RESIDUAL WITH ALKALINE DETERGENT.

===== Handling and Storage =====

Handling and Storage Precautions:STORE AWAY FROM SOURCES OF IGNITION. STORAGE AT TEMPERATURES BELOW 40F (4C) MAY RESULT IN PRECIPITATION OF SOME ROSIN. OPEN CONTAINERS CAUTIOUSLY TO ALLOW VENTING OF ANY INTERNAL PRESSURE.

Other Precautions:CAUTION: EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE. OBSERVE ALL LABEL PRECAUTIONS.

===== Exposure Controls/Personal Protection =====

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

Ventilation:PROVIDE ADEQUATE VENTILATION (GENERAL AND/OR LOCAL) AS NECESSARY TO MEET EXPOSURE REQUIREMENTS. LOCAL EXHAUST PREFERRED TO MINIMIZE SMOKE AND FUMES IN WORK AREA

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

Eye Protection:SAFETY GLASSES OR GOGGLES WHEN SPLASHING IS LIKELY TO OCCUR.

Other Protective Equipment:WEAR IMPERMEABLE APRON WHEN SPLASHING IS LIKELY TO OCCUR.

Work Hygienic Practices:WASH HANDS THOROUGHLY BEFORE EATING OR SMOKING.
Supplemental Safety and Health

===== Physical/Chemical Properties =====

HCC:F2

Boiling Pt:=76.7C, 170.F

Vapor Pres:33 MM HG @ 20C

Vapor Density:2.1 (AIR=1

Spec Gravity:0.891 (WATER=1 @25C)

VOC Pounds/Gallon:501

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

Appearance and Odor:AMBER LIQUID WITH ALCOHOL ODOR.

Percent Volatiles by Volume:70

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZING MATERIALS.

Stability Condition

to Avoid:NOT ESTABLISHED.

Hazardous Decomposition Products:COMBUSTION: CO, CO2, ALIPHATIC ALDEHYDES, ACIDS. WHEN HEATED TO SOLDERING TEMPERATURES, THE SOLVENTS ARE EVAPORATED AND ROSIN MAY BE THERMALLY DEGRADED TO LIBERATE ALIPHATIC ALDEHYDES, ACIDS, TERPENES.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

===== Toxicological Information =====

Toxicological Information:PRIMARY EXPOSURE DURING SOLDERING IS TO EVAPORATED ALCOHOL SOLVENT WHICH CONTAINS DROPLETS OF ROSIN AND / OR ORGANIC DECOMPOSITION PRODUCTS. TARGET ORGANS: EYES, SKIN, MUCOUS MEMBRANES AND RESPIRATORY SYSTEM. CARCINOGENICITY: NOT LISTED.

===== Disposal Considerations =====

Waste Disposal Methods:DISPOSE OF WASTE IN ACCORDANCE TO LOCAL REGULATIONS, USUALLY BY INCINERATION. EPA HAZARDOUS WASTE NUMBER IS D001. HAZARD CLASS IS IGNITABLE WASTE.

===== MSDS Transport Information =====

Transport Information:DOT: ISOPROPANOL, UN 1219, FLAMMABLE LIQUID. WHMIS: CLASS B, DIVISION 2, SUBDIVISION B. TDG: PACKAGING GROUP I, CLASS 3.2.

===== Other Information =====

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