

KESTER SOLDER DIV,LITTON SYSTEMS INC -- SOLDER ALLOYS CONTANING LEAD --
3439-01-146-6953

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

Product ID:SOLDER ALLOYS CONTANING LEAD

MSDS Date:05/20/1993

FSC:3439

NIIN:01-146-6953

MSDS Number: BXVQZ

=== Responsible Party ===

Company Name:KESTER SOLDER DIV,LITTON SYSTEMS INC

Address:515 E TOUHY

City:DES PLAINES

State:IL

ZIP:60018-2675

Country:US

Info Phone Num:708-297

-1600

Emergency Phone Num:708-297-1600

Preparer's Name:D. BERNIER

CAGE:75297

=== Contractor Identification ===

Company Name:GARDINER SOLDER CO, DIV OF GARDINER METAL CO

Address:4820 S CAMPBELL AVE

Box:City:CHICAGO

State:IL

ZIP:60632-1416

Country:US

Phone:312-847-0100/800-424-9300(CHEMTREC)

CAGE:56244

Company Name:GARDINER SOLDER COMPANY DIV GARDINER METAL CO

Address:4820 S CAMPBELL AVE

Box:City:CHICAGO

State:IL

ZIP:60632-1494

Country:US

Phone:312-847-0100 CHEMTREC AFTER HOURS

CAGE:84311

Compan

y 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

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

Ingred Name:LEAD (SARA III)
CAS:7439-92-1
RTECS #:OF7525000
Fraction by Wt: SEE #8%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:SEE 1910.1025
ACGIH TLV:0.15 MG/M3,DUST;9394
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:TIN
CAS:7440-31-5
RTECS #:XP7320000
Fraction by
Wt: SEE #8%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:2 MG/M3
ACGIH TLV:2 MG/M3; 9394

Ingred Name:SILVER (SARA III)
CAS:7440-22-4
RTECS #:VW3500000
Fraction by Wt: SEE #8%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:0.01 MG/M3
ACGIH TLV:0.1 MG/M3; 9394
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:BISMUTH
CAS:7440-69-9
RTECS #:EB2600000
Fraction by Wt: SEE #8%
Other REC Limits:NONE RECOMMENDED

Ingred Name:ANTIMONY (SARA III)
CAS:7440-36-0
RTECS #:CC4025000
Fraction by Wt: SEE #8%
Other REC L

imits:NONE RECOMMENDED
OSHA PEL:0.5 MG/M3
ACGIH TLV:0.5 MG (SB)/M3; 9394
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:COPPER (SARA III)
CAS:7440-50-8
RTECS #:GL5325000
Fraction by Wt: SEE #8%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:0.1MG/M3 FUME/1 DUST
ACGIH TLV:0.2 MG/M3 FUME; 9394
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:INDIUM
CAS:7440-74-6
RTECS #:NL1050000
Fraction by Wt: SEE # 8%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:0.1 MG/M3
ACGIH TLV:0.1 MG/M3; 9394

Ingr
ed Name:COMPOSITION & WT % OF SOLDER ALLOYS VARIES WIDELY & CAN BE
DETERMINED BY PRODUCT LABEL.
RTECS #:9999999ZZ
Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixture:PRODUCT'S LD50 (ORAL RAT) WAS NOT STATED
Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:YES OSHA:NO
Health Hazards Acute and Chronic:ACUTE-PRIMARAY EXPOSURE DURING
SOLDERING IS TO FLUX FUMES. INHAL:OVER
EXPOSURE TO LEAD MAY LEAD TO
CNS DISORDERS. EXPOSURE OF THIS MAGNITUDE ARE UNLIKELY.
SKIN/EYE:NONE. INGEST:NOT LIKELY TO OCCUR, BU T WOULD HAVE SIMILAR
EFFECTS AS INHALATION. CHRONIC-REPEATED INHAL/INGEST OF LEAD CAN
RESULT IN SYSTEMIC POISONING.
Explanation of Carcinogenicity:CARCINOGENICITY AS PER MFG'S MSDS. SEE
IARC REPORT FOR DETAILS.
Effects of Overexposure:CNS DISORDERS CHARACTERIZED BY DROWSINESS,
SEIZURES, COMA AND DEATH. REPEATED INHAL/INGEST OF LEAD CAN RESULT

IN SYSTEMIC POISONING.

Medical Cond Aggravated by Exposure:PRE-EXISTING CONDITIONS OR DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS, KIDNEYS, NERVES AND POSSIBLY REPRODUCTIVE ORGANS.

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First Aid Measures
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First Aid:SEEK MED ASSISTANCE FOR FURTHER TREATMENT, OBSERVATION AND SUPPORT IF NEEDED. EYE/SKIN:FOR BURNS FLUSH IMMEDIATELY W/COOL WATER. INHAL:REMOVE PERSON FROM EXPOSURE TO FUMES. INGEST:IF THOUGHT TO BE OVE REXPOSED, THE PERSON SHOULD HAVE A BLOOD LEAD ANALYSIS DONE.

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Fire Fighting Measures
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Extinguishing Media:MFR GAVE NO INFORMATION ON MSDS.
Fire Fighting Procedures:WEAR SELF-CONTAINED BREATHING APPARATUS IF THIS MATERIAL IS IN THE VICINITY OF A FIRE.
Unusual Fire/Explosion Hazard:FLUX IN CORED SOLDER MAY IGNITE WHEN THE SOLDER MELTS IN A FIRE.

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Accidental Release Measures
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Spill Release Procedures:MELTED SOLD ER WILL SOLIDITY ON COOLING AND CAN BE SCRAPED UP. USE CAUTION TO AVID BREATHAING FUMES IF A GAS TORCH IS USED TO CUT UP LARGE PIECES.
Neutralizing Agent:MFR GAVE NO INFORMATION ON MSDS.

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Handling and Storage
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Handling and Storage Precautions:STORE AWAY FROM SOURCES SULFUR. AVOID BREATHING SMOKE/FUMES GENERATED DURING SOLDERING.
Other Precautions:DO NOT PLACE FLUX CORED SOLDER INTO A HOT SOLDER POT BECAUSE THE FLUX MAY IGNITE. USE OF STRONG ACID FLUXES MAY RESULT IN LIBERATION OF TOXIC LEAD CHLORIDE FUMES. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE. OBSERVE ALL LABEL PRECAUTIONS.

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Exposure Controls/Personal Protection
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Respiratory Protection:USUALLY NOT REQUIRED. WHEN VENTILATION IS NOT SUFFICIENT TO REMOVE FUMES FROM THE BREATHING ZONE, A CARTRIDGE TYPE RESPIRATOR SHOULD BE WORN.
Ventilation:PROVIDE ADEQUATE EXHAUST VENTILATION (GENERAL &/OR LOCAL) TO MEET TLV REQUIREMEN

TS.

Protective Gloves:USUALLY NOT REQUIRED.

Eye Protection:WHEN SOLDERING USE GOGGLES OR FACESHIELD

Other Protective Equipment:NONE.

Work Hygienic Practices:WASH HANDS THOROUGHLY AFTER HANDLING SOLDER
CONTAINING LEAD BEFORE EATING OR SMOKING.

Supplemental Safety and Health

LEAD IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS
OR OTHER REPRODUCTIVE HARM.

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

HCC:N1

NRC/State Lic Num:NONE

Spec Gravity:>1,

Solubility in Water:INSOLUBLE

Appearance and Odor:SILVER-GRAY METAL IN BAR, WIRE, RIBBON OR PREFORMED
SHAPES.

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

Stability Indicator/Materials to Avoid:YES

STRONG ACID, STRONG OXIDIZERS.

Stability Condition to Avoid:NONE.

Hazardous Decomposition Products:NO LEAD OR ANTIMONY FUMES ARE DETECTED
FROM SOLDERING BELOW 1000F (537C)

Conditions to Avoid Polymerization:WILL NOT OCCUR.

===== Disposal Considerations
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Waste Disposal Methods:SOLDER CAN BE RECLAIMED.

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