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## **"245" ROSIN FLUX CORED SOLDER**

### **MSDS Number**

CKWDM

### **National Stock Number**

3439-01-196-5485

### **Product Name**

"245" ROSIN FLUX CORED SOLDER

### **Manufacturer**

KESTER SOLDER DIV OF LITTON SYSTEMS INC

### **Product Identification**

Product ID:"245" ROSIN FLUX CORED SOLDER

MSDS Date:12/11/1998

FSC:3439

NIIN:01-196-5485

Status Code:A

MSDS Number: CKWDM

### **Responsible Party**

KESTER SOLDER DIVISION OF LITTON SYSTEMS, INC.

515 E. TOUHY AVENUE

DES PLAINES , IL 60018

US

Emergency Phone: (800)424-9300

Info Phone: 847-297-1600

Preparer: D. BERNIER

Cage: 75297

### **Contractor**

ROCKWELL INTL CORP COLLINS AVIONICS & COMM DIV

7922

CEDAR RAPIDS, IA 52498

US

847-297-1600

Cage: 13499

### **Ingredients**

LEAD

CAS: 7439-92-1

RTECS: OF7525000

OSHA PEL0.05 MG/M3

ACGIH TLV: 0.15 MG/M3

EPA Report Quantity: 1 LB

DOT Report Quantity: 1 LB

TIN

CAS: 7440-31-5



RTECS: XP7320000  
OSHA PEL2 MG/M3  
ACGIH TLV: 2 MG/M3

SILVER  
CAS: 7440-22-4  
RTECS: VW3500000  
OSHA PEL0.01 MG/M3  
ACGIH TLV: 0.1 MG/M3  
EPA Report Quantity: 1 LB  
DOT Report Quantity: 1 LB

BISMUTH  
CAS: 7440-69-9  
RTECS: EB2600000  
OSHA PELNE  
ACGIH TLV: NE

ANTIMONY  
CAS: 7440-36-0  
RTECS: CC4025000  
OSHA PEL0.5 MG/M3  
ACGIH TLV: 0.5 MG/M3  
EPA Report Quantity: 5000 LBS  
DOT Report Quantity: 5000 LBS

MODIFIED RESIN  
CAS: 65997-05-9  
OSHA PELNE  
ACGIH TLV: NE

CARBOXYLIC ACIDS  
CAS: 68603-86-1  
OSHA PELNE  
ACGIH TLV: NE

FLUX IN CORE

## Hazards

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:UNKNOWN IARC:YES  
Health Hazards Acute and Chronic:TARGET ORGANS: FLUX FUMES: EYES, SKIN,  
MUCOUS MEMBRANES & RESPIRATORY SYSTEM. INGESTION OF LEAD METAL CAN  
AFFECT KIDNEYS, GASTROINTESTINAL, REPRODUCTIVE & NEUROLOGICAL  
SYSTEMS. INHALATION: FLUX FUMES DURING SOLDERING MAY CAUSE



IRRITATION & DAMAGE OF MUCOUS MEMBRANES & RESPIRATORY SYSTEM. SKIN: POSSIBLE LOCAL IRRITATION BY CONTACT WITH FLUX OR FUMES. SKIN ABSORPTION: NONE. EYE: IRRITATION FROM CONTACT WITH SMOKE FROM SOLDERING. INGESTION: NOT LIKELY TO OCCUR. CHRONIC: BREATHING FUMES DURING SOLDERING MAY CAUSE RESPIRATORY SYSTEM IRRITATION, HEADACHE & IRRITATION OF MUCOUS MEMBRANES. (SEE SUPPLEMENTAL).

Explanation of Carcinogenicity: LEAD AND ITS COMPONENTS HAVE BEEN PLACED IN CLASS B2, POSSIBLY CARCINOGENIC TO HUMANS BY USEPA. IARC HAS PLACED LEAD AND ITS COMPOUNDS IN CLASS 2B, POSSIBLY CARCINOGENIC TO HUMANS.

Effects of Overexposure: INHALATION: IRRITATION & DAMAGE OF MUCOUS MEMBRANES & RESPIRATORY SYSTEM. SKIN: POSSIBLE LOCAL IRRITATION BY CONTACT WITH FLUX OR FUMES. EYE: IRRITATION FROM CONTACT WITH SMOKE FROM SOLDERING. CHRONIC: BREATHING FUMES DURING SOLDERING MAY CAUSE RESPIRATORY SYSTEM IRRITATION, HEADACHE & IRRITATION OF MUCOUS MEMBRANES.

Medical Conditions Aggravated by Exposure: FLUX: PRE-EXISTING CONDITIONS OF THE LUNGS. LEAD: DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS, KIDNEYS, NERVES AND POSSIBLE REPRODUCTIVE SYSTEM.

## First Aid

First Aid: SEEK MEDICAL ASSISTANCE FOR FURTHER TREATMENT, OBSERVATION AND SUPPORT IF NEEDED. EYE: FOR BURNS FLUSH IMMEDIATELY WITH COOL WATER. FOR FUME IRRITATION USE EYE DROPS AND REMOVE FROM EXPOSURE. SKIN: FOR BURNS FLUSH IMMEDIATELY WITH COOL WATER. IF A RASH DEVELOPS FROM FLUX FUMES, REMOVE PERSON FROM EXPOSURE AND WASH SKIN WITH SOAP AND WATER. INHALATION: REMOVE PERSON FROM EXPOSURE TO FUMES. INGESTION: N/A.

## Fire Fighting

Flash Point Method: TOC

Extinguishing Media: NO DATA PROVIDED BY MANUFACTURER

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. MELTED SOLDER MAY LIBERATE CARBON MONOXIDE, CARBON DIOXIDE, LEAD OXIDE FUMES.

## Accidental Release

Spill Release Procedures: MELTED SOLDER WILL SOLIDIFY ON COOLING AND CAN BE SCRAPED UP. USE CAUTION TO AVOID BREATHING FUMES IF A GAS TORCH IS USED TO CUT LARGE PIECES.

Neutralizing Agent: NO DATA PROVIDED BY MANUFACTURER

## Handling

Handling and Storage Precautions: STORE AWAY FROM SOURCES OF SULFUR. WASH HANDS AFTER HANDLING SOLDER CONTAINING LEAD BEFORE EATING OR SMOKING. AVOID BREATHING SMOKE/FUMES GENERATED DURING SOLDERING. DO NOT PLACE FLUX CORED SOLDER INTO A HOT SOLDER POT BECAUSE THE FLUX MAY IGNITE.

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

## 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 ADEQUATE EXHAUST VENTILATION (GENERAL &/OR LOCAL) IF NECESSARY TO MEET EXPOSURE REQUIREMENTS. LOCAL EXHAUST VENTILATION IS PREFERRED TO MINIMIZE

Protective Gloves: USUALLY NOT REQUIRED.

Eye Protection: WHEN SOLDERING, USE GOGGLES OR FACE SHIELD.

Other Protective Equipment: NONE.

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

Supplemental Safety and Health

CHRONIC: SMOKE DURING SOLDERING WILL CONTAIN ROSIN WHICH IS AN ALLERGEN



AND CAN CAUSE RESPIRATORY SYSTEM IRRITATION AND DAMAGE. REPEATED INGESTION OF LEAD CAN RESULT IN SYSTEMIC POISONING.

## Chemical Properties

HCC:N1  
Decomp Temp:Decomp Text:N/E  
Spec Gravity:>1  
Solubility in Water:0  
Appearance and Odor:SILVER-GRAY METAL IN WIRE,RIBBON OR PREFORMED SHAPES W/A CORE OF FLUX, NO ODOR

## Stability

STRONG ACID, STRONG OXIDIZERS.  
Stability Condition to Avoid:NONE  
Hazardous Decomposition Products:WHEN HEATED TO SOLDERING TEMPERATURES, THE SOLVENT IN THE FLUX WILL BOIL AWAY & CARRY UP DROPLETS OF ROSIN & THERMAL DEGRADE PRODUCT SUCH AS ALIPHATIC ALDEHYDES, ACIDS & TERPENES.  
Conditions to Avoid Polymerization:WILL NOT OCCUR.

## Disposal

Waste Disposal Methods:SOLDER CAN BE RECLAIMED.

## Toxicology

Toxicological Information:NO DATA PROVIDED BY MANUFACTURER

## Other Information

Disclaimer (provided with this information by the compiling agencies): This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.

## Ecology

Ecological:NO DATA PROVIDED BY MANUFACTURER

## Transport

Transport Information:DOT: NOT REGULATED. TDG: NOT REGULATED.

## Regulatory

SARA Title III Information:THESE CHEMICALS AARE SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE US SUPERFUND AMENDMENT AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372: LEAD, SILVER, ANTIMONY.

Federal Regulatory Information:NO DATA PROVIDED BY MANUFACTURER