

LITTON ELECTRON DEVICES -- L2806A TRAVELING WAVE TUBE BAND 3 W/ALNICO MAGNETS --  
5865-00-476-4443

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

Product ID:L2806A TRAVELING WAVE TUBE BAND 3 W/ALNICO MAGNETS

MSDS Date:04/15/1989

FSC:5865

NIIN:00-476-4443

MSDS Number: BLRDQ

=== Responsible Party ===

Company Name:LITTON ELECTRON DEVICES

Address:960 INDUSTRIAL RD

City:SAN CARLOS

State:CA

ZIP:94070

Info Phone Num:

(415) 591-8411

Emergency Phone Num:(415) 591-8411

CAGE:FO469

=== Contractor Identification ===

Company Name:LITTON ELECTRON DEVICES

Address:960 INDUSTRIAL RD

City:SAN CARLOS

State:CA

ZIP:94070

Country:US

Phone:415-591-8411

CAGE:FO469

Company Name:LITTON ELECTRON DEVICES .

Address:960 INDUSTRIAL RD

Box:City:SAN CARLOS

State:CA

ZIP:94070

Country:US

Phone:650-591-8411

CAGE:80080

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

Ingred Name:ALUMINUM (SARA III)

CAS:7429-90-5

RTE

CS #:BD0330000  
OSHA PEL:15MG/M3 DUST/5 FUME  
ACGIH TLV:10MG/M3 DUST; 9192

Ingred Name:NICKEL (SARA III)  
CAS:7440-02-0  
RTECS #:QR5950000  
Other REC Limits:1 MG/CUM  
OSHA PEL:1 MG/M3  
ACGIH TLV:1 MG/M3; 9192

Ingred Name:COBALT (SARA III)  
CAS:7440-48-4  
RTECS #:GF8750000  
Other REC Limits:0.05 PPM  
OSHA PEL:0.1 MG/M3;AS CO  
ACGIH TLV:0.05 MG/M3;DUST 9293

Ingred Name:COPPER (SARA III)  
CAS:7440-50-8  
RTECS #:GL5325000  
Other REC Limits:1 MG(CU)/M3 (DUST)  
OSHA PEL:0.1MG/M3 FUME/1 DUST  
ACGIH TLV:0.2MG/M3 F  
UME; 9192  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:TITANIUM DIOXIDE  
CAS:13463-67-7  
RTECS #:XR2275000  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:IRON OXIDE  
CAS:1309-37-1  
RTECS #:NO7400000  
OSHA PEL:10 MG/M3 (FE)  
ACGIH TLV:5 MG/M3(FE),B2; 9293

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO  
Health Hazards Acute and Chronic:INH

ALATION: UPPER RESPIRATORY TRACT  
IRRITATION. SKIN: ALLERGIC REACTION.

Explanation of Carcinogenicity:NICKEL IS A SUSPECTED HUMAN CARCINOGEN  
BY ACGIH.

Effects of Overexposure:INHALATION: UPPER RESPIRATORY TRACT IRRITATION.  
SKIN: ALLERGIC REACTION.

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

First Aid:OBTAIN MEDICAL ATTENTION IN ALL CASES.

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

Extinguishing Media:BLANKET, DRY NITROGEN, ARGON,  
OR DRY CHEMICAL.

DON'T USE WATER OR HALON AGENTS.

Fire Fighting Procedures:POWDER BURNS RAPID/INTENSE. POWDER MAY  
REIGNITE AFTER EXTINGUISHED. RARE EARTH METAL POWDERS (SAMARIUM)  
BURN VIGOROUSLY IN HALOGEN OR ORGANIC ATMOSPHERE.

Unusual Fire/Explosion Hazard:FINE METAL POWDERS PRODUCED BY DRY  
GRINDING/MACHING MAY CAUSE EXPLOSION. DRY POWDER/GRINDING SLUDGE  
MAY IGNITE SPONTANEOUSLY IN AIR OR OXYGEN.

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

Handling

and Storage Precautions:DON'T SHIP ON AIRCRAFT ANY MICROWAVE  
TUBES W/MAGNETIC FIELD >0.00525 GAUSS MEASURED AT 15 FT. (4.6 M)  
FROM ANY SURFACE OF THE PACKAGE.

Other Precautions:NO SPECIAL PROTECTION IS REQUIRED FOR MICROWAVE TUBES  
AS SHIPPED. DON'T GRIND, CUT, FILE, SAW OR OTHERWISE CREATE DUST  
FROM MAGNETIC MATERIAL USED AS A PART OF MICROWAVE TUBES.

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

Work Hygienic Practices:USE GOOD HYGIENE.

Supplemental Safe  
ty and Health

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

Melt/Freeze Pt:M.P/F.P Text:>2417F

Spec Gravity:7.0-8.5

Solubility in Water:INSOLUBLE

Appearance and Odor:METALLIC SILVER/LIGHT GRAY METAL, ODORLESS

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

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZING AGENTS, ACIDS, OXYGEN, HALOGENATED HYDROCARBONS, &  
WATER

Hazardous Decomposition Products:HYDROGEN

===== Disposal C

considerations =====

Waste Disposal Methods:RECYCLING OF MAGNETS USED IN MICROWAVE TUBES IS  
RECOMMENDED. RETURN TO MANUFACTURER FOR RECYCLING OR DISPOSE  
ACCORDING TO FEDERAL, STATE, & LOCAL REGULATIONS.

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