

LITTON SYSTEMS INC/ELECTRONIC DEVICES DIV -- LITTON PN L5839 ALNICO MAGNETS --  
5960-01-094-9540

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

Product ID:LITTON PN L5839 ALNICO MAGNETS

MSDS Date:04/15/1989

FSC:5960

NIIN:01-094-9540

MSDS Number: BNKMB

=== Responsible Party ===

Company Name:LITTON SYSTEMS INC/ELECTRONIC DEVICES DIV

Address:960 INDUSTRIAL RD

City:SAN CARLOS

State:CA

ZIP:94070-4116

Country:US

In

fo Phone Num:(415) 591-8411

Emergency Phone Num:(415) 591-8411

CAGE:80080

=== Contractor Identification ===

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 (POWDER)

CAS:7429-90-5

RTECS #:BD0330000

OSHA PEL:15 MG/CUM

ACGIH TLV:10 MG/CUM (DUST)

Ingred Name:NICKEL (SOLUBLE)

INTENDED CHANGE (IC)

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AS:7440-02-0  
RTECS #:QR5950000  
Other REC Limits:1 MG/CUM  
OSHA PEL:1 MG/CUM  
ACGIH TLV:0.05 MG/CUM IC (A1)

Ingred Name:COBALT  
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 (DUST & MIST), BRONZE POWDER  
CAS:7440-50-8  
RTECS #:GL5325000  
Other REC Limits:1 MG(CU)/M3 (DUST)  
OSHA PEL:0.1 MG(CU)/M3 (FUME)  
ACGIH TLV:0.2 MG/M3 (FUME)  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:TITANIUM DIOXIDE, TITANIUM(IV) OXIDE, TIO2  
CAS:13463-67-7  
RTECS #:XR2275000  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3 TDUST; 9293

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

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:INHALATION: UPPER RESPIRATORY TRACT IRRITATION. SKIN: ALLERGIC REACTION

Explanation of Carcinogenicity:NONE

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

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

First Aid:OBTAIN MEDICAL ATTENTION IN ALL CASES.

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

Extinguishing Media:DRY NITROGEN OR ARGON OR SMOTHER W/DRY CHEMICAL

Fire Fighting Procedures:DON'T USE WATER OR HALON AGENTS ON FIRE. POWDER MAY REIGNITE AFTER FIRES ARE EXTINGUISHED. BURNS RAPIDLY & INTENSELY.

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

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

Other Precautions:DON'T GRIND, CUT, FILE, SAW OR OTHERWISE CREATE DUST FROM MAGNETIC MATERIAL USED AS A PART OF MICROWAVE TUBES.

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

Work Hygienic Practices:USE GOOD PERSONAL HYGIENE  
Supplemental Safety and Health

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===== 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 GREY METAL, ODORLESS.

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

Stability In

icator/Materials to Avoid: YES

STRONG OXIDIZING AGENTS, ACIDS, OXYGEN & HALOGENATED HYDROCARBONS.

Hazardous Decomposition Products: RARE EARTH (SAMARIUM COLBALT) MAGNET  
POWDER WILL LIBERATE HYDROGEN WHEN EXPOSED TO WATER.

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

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

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