

LITTON SYSTEMS INC/ELECTRONIC DEVICES DIV -- LITTON PN L5838 SAMARIUM COBALT
MAGNET -- 5960-01-096-3457

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

Product ID:LITTON PN L5838 SAMARIUM COBALT MAGNET
MSDS Date:04/15/1989
FSC:5960
NIIN:01-096-3457
MSDS Number: BNKMF
=== Responsible Party ===
Company Name:LITTON SYSTEMS INC/ELECTRONIC DEVICES DIV
Address:960 INDUSTRIAL RD
City:SAN CARLOS
State:CA
ZIP:94070-
4116
Country:US
Info 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: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:SAMARIUM
CAS

:7440-19-9

Ingred Name:PRASEODYMIUM
CAS:7440-10-0

Ingred Name:RARE EARTH

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

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:ZIRCONIUM

CAS:7440-67-7

RTECS #:ZH7070000

OSHA PEL:5 MG/CUM

ACGIH TLV:5 MG/CUM

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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 B

Y 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 Indicator/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.

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===== 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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