

VARIAN ASSOCIATES INC., POWER GRID & X-RAY TUBE -- 4CX350 ELECTRON TUBE --
5960-00-765-6085

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

Product ID:4CX350 ELECTRON TUBE

MSDS Date:05/28/1991

FSC:5960

NIIN:00-765-6085

MSDS Number: BMDSJ

=== Responsible Party ===

Company Name:VARIAN ASSOCIATES INC., POWER GRID & X-RAY TUBE

Address:301 INDUSTRIAL WAY

City:SAN CARLOS

State:CA

ZIP:94070-2603

Country:US

Info Ph

one Num:415-973-1221

Emergency Phone Num:415-592-1221

CAGE:06980

=== Contractor Identification ===

Company Name:VARIAN ASSOCIATES INC EIMAC DIVISION

Address:301 INDUSTRIAL WAY

City:SAN CARLOS

State:CA

ZIP:94070-2603

Country:US

Phone:415-592-1221

CAGE:06980

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

Ingred Name:THORIUM METAL (CONTAINED AS AN ALLOY IN THE TUNGSTEN
FILLIMENT)

CAS:7440-29-1

RTECS #:XO6400000

Other REC Limits:NONE SPECIFIED

Ingred Name:THE FILLIMENT O

F THE TUBE CONTAINS APPROXIMATELY 96%

TUNGSTEN AND 4% THORIUM.

RTECS #:9999999ZZ

Other REC Limits:NONE SPECIFIED

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

LD50 LC50 Mixture:ORAL RAT LD50 IS NOT RELAVENT

Routes of Entry: Inhalation:NO Skin:NO Ingestion:NO

Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO

Health Hazards Acute and Chronic:NOT RELAVENT

Explanation of Carcinogenicity:TUBE CONTAINS VERY LITTLE THORIUM. SEE
SUPPLEMENTAL DATA.

Effects of Ove

rexposure:NOT RELAVENT

Medical Cond Aggravated by Exposure:NOT RELAVENT

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

First Aid:NOT RELAVENT

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

Flash Point:NON-FLAMMABLE

Extinguishing Media:PRODUCT IS NON FLAMMABLE. EXTINGUISH FIRE WITH
MEDIA APPROPRIATE FOR SOURCE OF FIRE.

Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA &
FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FI
RE. USE WATER

SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE.

Unusual Fire/Explosion Hazard:NONE - SEE OPERATING HAZARDS ON THE
MANUFACTURERE USE SHEET.

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===== Accidental Release Measures =====

Spill Release Procedures:NOT RELAVENT

Neutralizing Agent:NOT RELAVENT

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

Handling and Storage Precautions:NOT RELAVENT

Other Precautions:NOT RELAVENT

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===== Exposure Controls/Personal Protecti

on =====

Respiratory Protection:NOT RELAVENT
Ventilation:NOT RELAVENT
Protective Gloves:NOT RELAVENT
Eye Protection:NOT RELAVENT
Other Protective Equipment:NOT RELAVENT
Work Hygienic Practices:NOT RELAVENT
Supplemental Safety and Health

THIS PRODUCT MEETS THE 29CFR 1910.1200 DEFINITION OF AN ARTICLE AND
THUS REQUIRES NO MSDS. THE MANUFACTURER OF THE TUBE SUPPLIED A
MATERIAL SAFETY DATA SHEET FOR THORIATED TUNGSTEN FROM PHILLIPS
LIGH TING PRODUCTS WHICH IS APPROPRIATE INFOR
MATION TO ONE
MANUFACTURING TUNGSTEN WIRE. IT DOES NOT APPLY TO USING THE TUBE.

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

HCC:N1
Appearance and Odor:ELECTRON TUBE, NO ODOR

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

Stability Indicator/Materials to Avoid:YES
NOT RELAVENT
Stability Condition to Avoid:NOT RELAVENT
Hazardous Decomposition Products:NOT RELAVENT

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

Waste Disp
osal Methods:DISPOSE I/A/W ALL FEDERAL, STATE AND LOCAL
REGULATIONS. MANUFACTURER MAKES NO SUGGESTIONS AS TO METHOD OF
DISPOSAL.

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