

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 Phone 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 OF THE TUBE CONTAINS APPROXIMATELY 96%
TUNGSTEN AND 4% THORIUM

RTECS #:9999999ZZ

Other REC Limits:NONE SPECIFIED

===== 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 Overexposure:NOT RELAVENT

Medical Cond Aggravated by Exposure:NOT RE

LAVENT

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

First Aid:NOT RELAVENT

===== 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 FIRE. USE WATER SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE

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

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

Spill Release Procedures:NOT RELAVENT

Neutralizing Agent:NOT RELAVENT

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

Handling and Storage Precautions:NOT RELAVENT

Other Precautions:NOT RELAVENT

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

Respiratory Protection:NOT RELAVENT

Ventilatio

n: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 INFORMATION 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 Disposal Methods:DISPOSE I/A/W ALL FEDERAL, STATE AND LOCAL
REGUL
ATIONS. MANUFACTURER MAKES NO SUGGESTIONS AS TO METHOD OF
DISPOSAL.

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