

COMMUNICATIONS AND POWER INDUSTRIES INC -- VMX1611 -- 5960-01-065-5332

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

Product ID:VMX1611  
MSDS Date:09/14/1998  
FSC:5960  
NIIN:01-065-5332  
Status Code:A  
MSDS Number: CJDNK  
=== Responsible Party ===  
Company Name:COMMUNICATIONS AND POWER INDUSTRIES INC  
Address:150 SOHIER RD  
City:BEVERLY  
State:MA  
ZIP:01915-5595  
Country:US  
Info Phone Num:978-922-6000  
Emergency Phone Nu  
m:978-922-6000  
Preparer's Name:FRANK E. TROJAN  
CAGE:88236  
=== Contractor Identification ===  
Company Name:COMMUNICATIONS AND POWER INDUSTRIES INC  
Address:150 SOHIER RD  
City:BEVERLY  
State:MA  
ZIP:01915-5595  
Country:US  
Phone:978-922-6000 EXT.285  
Contract Num:N00104-96-G-A411  
CAGE:88236

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

Ingred Name:BERYLLIUM  
CAS:7440-41-7  
RTECS #:DS1750000  
OSHA PEL:see Table Z-2  
ACGIH TLV:0.002 MG/M3

Ingred Name:BERYLLIUM OXIDE  
CAS:1304-56-9  
RTE

Ingred Name:MAGNETIZED MATERIAL

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO  
Health Hazards Acute and Chronic:NORMAL OPERATING VOLTAGES CAN BE DEADLY. EXPOSURE TO RF RADIATION MAY CAUSE SERIOUS BODILY INJURY POSSIBLY RESULTING IN BLINDNESS OR DEATH. RF RADIATION MAY AFFECT CARDIAC PACEMAKERS. HIGH VOLTAGE TUBES CAN PRODUCE DANGER, POSSIBLY FATAL, X-RAYS. BROKEN OR DISASSEMBLED RECEIVER PROTECTOR TUBES MAY EMIT IONIZING RADIATION. EXPOSURE TO ULTRAVIOLET RADIATION CAN CAUSE PAINFUL SKIN BURNS AND SERIOUS EYE DAMAGE OR IRRITATION. DUST OR FUMES FROM BERYLLIUM AND BERYLLIUM OXIDE IS HIGHLY TOXIC. BREAKDOWN OF DIELECTRIC GAS MAY CREATE TOXIC OR CORROSIVE COMPOUNDS.  
Explanation of Carcinogenicity:BERYLLIUM: IARC MONOGRAPHS, SUPPLEMENT, VOL 7, PG 127, 1987: GROUP 1. NTP 7TH ANNUAL REPORT ON CARCINOGENS, 1994: ANTICIPATED TO BE CARCINOGEN.  
Effects of Overexposure:SEE HEALTH HAZARDS.

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

First Aid:INGEST: CALL MD IMMEDIATELY . INHAL: REMOVE TO FRESH AIR. SUPPORT BREATHING (GIVE OXYGEN/ARTIFICIAL RESPIRATION) . EYES: IMMEDIATELY FLUSH EYES W/POTABLE WATER FOR AT LEAST 15 MINUTES. SEEK ASSISTANCE FROM MD . SKIN: FLUSH W/COPIOUS AMOUNTS OF WATER. CALL MD .

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

Extinguishing Media:NOT APPLICABLE. MEDIA SUITABLE FOR SURROUNDING FIRE .  
Fire Fighting Procedures:USE NIOSH APPROVED SCBA AND FULL PROTECTIVE EQUIPMENT .  
Unusual Fire/Explosion Hazard:NOT APPLICABLE.

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

Spill Release Procedures:NOT APPLICABLE.

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

Handling and Storage Precautions:DEVICE IS ELECTRON TUBE WHICH CONTAINS PERMANENT

MAGNETIC FIELD WHICH DOES NOT EXCEED LIMITS  
SPECIFIED IN 49 CFR 173.21(D). PROPER USE AND SAFE OPERATING  
PRACTICES W/RESPECT TO MICROWAVE TUBES/EQUIP ARE RESPONSIBILITY OF  
EQUIP MFR & USERS OF TUBES/EQUIP.

Other Precautions:WARNING. SERIOUS HAZARDS EXIST IN OPERATION OF MICROWAVE  
TUBES/EQUIP. IMPLOSION HAZARD - WINDOWS IN MICROWAVE TUBES CAN  
SHATTER ON IMPACT OR CRACK IN USE. THIS MAY RESULT IN INJURY FROM  
FLYING PARTICLES OR FROM BERYLLIUM OXIDE DUST OR FUME. HOT LIQUID -

A LIQUID-COOLED TUBE AND THE LIQUID USED TO COOL IT (TOX INFO)

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

Respiratory Protection:NOT APPLICABLE. USE NIOSH APPROVED RESPIRATOR  
APPROPRIATE FOR EXPOSURE OF CONCERN .

Ventilation:NOT APPLICABLE.

Protective Gloves:IMPERVIOUS GLOVES .

Eye Protection:ANSI APPROVED CHEMICAL WORKERS GOGGLES .

Other Protective Equipment:ANSI APPROVED EYE WASH & DELUGE SHOWER .

Work Hygienic Practices:NOT APPLICABLE.

Supplemental Safety and Health

HNDLG/STOR PRECS: INDUSTRIES, INC. BEVERLY MICROWAVE DIVISION PROVIDES  
INFORMATION ON ITS PRODUCTS AND ASSOCIATED HAZARDS, BUT DOES NOT  
ASSUME RESPONSIBILITY FOR AFTER-SALE OPERATING AND SAFETY PRACTICES.  
(FED REGS)

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

Appearance and Odor:NOT APPLICABLE.

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

NONE KNOWN.

Stability Condition to Avoid:NOT APPLICABLE.

Hazardous Decomposition Products:NOT APPLICABLE.

===== Toxicological Information =====

Toxicological Information:OTHER INFO: CAN REACH SCALDING TEMPS & CAUSE  
SERIOUS BURNS. HOT SURFACES - AIR-COOLED SURFACES MAY REACH HIGH  
TEMPS & CAUSE SERIOUS BURNS.

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

Waste Disposal Methods:NOT APPLICABLE. DISPOSAL MUST BE IN ACCORDANCE  
WITH FEDERAL, STATE AND LOCAL REGULATIONS .

===== MSDS Transport Information

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Transport Information:APPLICABLE REGULATIONS: 49 CFR IATA. SHIPPING  
NAME: ELECTRON TUBE. IDENTIFICATION NUMBER: UN2807. REPORTABLE  
QUANTITY: NOT APPLICABLE. HAZARD CLASS: CLASS 9. LABELS: YES. UNIT  
CONTAINER: FOAM PACK INS IDE FIBERBOARD BOX. DOT SPECIFICATION  
CONTAINER: NO. NET EXPLOSIVE WEIGHT: NOT APPLICABLE. LIMITED  
QUANTITY: NOT APPLICABLE. AEROSOL PROPELLANT(S): NOT APPLICABLE.  
US POSTAL SERVICE REGULATIONS: MAY BE MAILED. MAGNATISM: DOES NO  
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EXCEED 0.148 A/M (0.00525 GAUSS).

===== Other Information =====

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