

VICTOREEN INC -- SPARK GAP -- 5840-01-217-2470

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Product Identification  
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Product ID:SPARK GAP  
MSDS Date:10/08/1991  
FSC:5840  
NIIN:01-217-2470  
MSDS Number: CCSWN  
=== Responsible Party ===  
Company Name:VICTOREEN INC  
Address:6000 COCHRAN RD  
City:SOLO  
State:OH  
ZIP:44139-3395  
Country:US  
Info Phone Num:216-248-9300  
Emergency Phone Num:216-248-9300  
Preparer's Name:ROBERT A. JUCIUS  
CAGE:63060

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Contractor Identification ====  
Company Name:VICTOREEN INC  
Address:6000 COCHRAN RD  
Box:City:SOLO  
State:OH  
ZIP:44139-3395  
Country:US  
Phone:216-248-9300  
CAGE:63060

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Composition/Information on Ingredients  
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Ingred Name:NICKEL-63  
CAS:7440-02-0  
Other REC Limits:NONE RECOMMENDED

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Hazards Identification  
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LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.  
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO  
Reports of Carcinogen

icity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:METAL PRODUCTS IN THE NATURAL STATE DO NOT PRESENT AN INHALATION, INGESTION OR CONTACT HAZARD; HOWEVER, SUCH OPERATIONS SUCH AS BURNING, SAWING, BRAZING & GRINDING MAY RELEASE FUMES/DUSTS WHICH MAY PRESENT HEALTH HAZARDS IF TLVS EXCEEDED. THE RADIOACTIVE MATERIAL IN THE DEVICES REPRESENT NO SIGNIFICANT RISK.

Explanation of Carcinogenicity:NONE SPECIFIED BY MANUFACTURER.

Effects of Overexposure:BECAUSE OF THE AMOUNT OF NICKEL-63 CONTAINED IN

THE DEVICES THIS SECTION IS NOT APPLICABLE.

Medical Condition Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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First Aid Measures  
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First Aid:NOT APPLICABLE.

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Fire Fighting Measures  
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Extinguishing Media:USE MEDIA APPROPRIATE FOR SURROUNDING FIRE.

Fire Fighting Procedures:NICKEL-63 IN THE SOLID STATE PRESENTS NO FIRE OR EXPLOSION HAZARD.

Unusual Fire/Explosion Hazard:

NONE SPECIFIED BY MANUFACTURER.

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Accidental Release Measures  
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Spill Release Procedures:NOT APPLICABLE.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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Handling and Storage  
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Handling and Storage Precautions:NONE SPECIFIED BY MANUFACTURER.

Other Precautions:ALL TUBES CONTAIN AN EXEMPT QUANTITY OF NI-63 AS DEFINED BY USNRC. PHYSICAL DATA:BETA RAY ENERGY-67 KEV;GAMMA RAYS-NONE;BETA RAY RANGE IN AIR

ABOUT 5 CM (2 INCHES).THE

MICROCURIE AMOUNTS OF NI-63 REPRESENT AN INSIGNIFICANT EXTERNAL HAZARD.

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Exposure Controls/Personal Protection  
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Respiratory Protection:NONE NORMALLY REQUIRED.

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

THE RADIOACTIVE MATERIAL IS CONTAINED IN AN INERT SEALED VESSEL TO OBVIATE EXTERNAL OR INTERNAL HAZARDS. THE ALLOWABLE EXPOSURE LIMITS FOR NI-63 ARE OVER 1000 TIMES THE MATERIAL C

CONTAINED IN ONE OF THE  
DEVICES. THE CRITICAL ORGAN FOR NI-63 IS THE BONE. THE ELIMINATION  
RATE IS 800 DAY HALF-LIFE BY ELIMINATION THRU URINE

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

HCC:A2

Melt/Freeze Pt:M.P/F.P Text:2300F,1260C

Spec Gravity:7

Solubility in Water:NEGLIGIBLE

Appearance and Odor:GRAYISH TO BLACK PLATING ON ELECTRONIC DEVICE.

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

Stability Indicator/Materials to Avoid:YES

NI-63

REACTS WITH STRONG MINERAL ACIDS TO FORM HYDROGEN GAS.

Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:METALLIC DUSTS/FUMES MAY BE PRODUCED  
DURING WELDING, BURNING, GRINDING & POSSIBLY MACHING. REFER TO ANSI  
Z49.1.

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND  
FEDERAL ENVIRONMENTAL REGULATIONS.

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