

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

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

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:SOLON
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
===

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

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

Ingred Name:NICKEL-63
CAS:7440-02-0
Other REC Limits:NONE RECOMMENDED

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

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 PR ESENT HEALTH HAZARDS IF TLVS EXCEEDED. THE RADIOACTIVEMATERIAL IN THE DEVICES REPRESENT NO SIGNIFIGANT RISK.

Explanation of Carcinogenicity:NONE SPECIFIED BY MANUFACTURER.

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

THE DEVICES THIS SECTION IS NOT APPLICABLE.

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:NOT APPLICABLE.

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

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 Haz

ard:NONE SPECIFIED BY MANUFACTURER.

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

Spill Release Procedures:NOT APPLICABLE.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:NONE SPECIFIED BY MANUFACTURER.

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

R-ABOUT 5 CM (2 INCHES).THE

MICROCURIE AMOUNTS OF NI-63 REP RESENT AN INSIGNIFIGANT EXTERNAL
HAZARD.

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

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

ONTAINED IN ONE OF TH E
DEVICES. THE CRITICAL ORGAN FOR NI-63IS 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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