

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: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

=== 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

===== 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 Carcinogenicity: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.

===== 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 Hazard: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 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.

===== 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 CONTAINED IN ONE OF THE DEVICES. THE CRITICAL ORGAN FOR NI-6

3IS 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.

Disclaimer (provided with this information by the compiling agencies):
This information is formulated for use by
elements of the Department
of Defense. The United States of America in no manner whatsoever,
expressly or implied, warrants this information to be accurate and
disclaims all liability for its use. Any person utilizing this
document should seek competent professional advice to verify and
assume responsibility for the suitability of this information to their
particular situation.