

OAK RIDGE NATIONAL LABORATORY -- THORIUM-232 -- 6665-01-247-7284

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Product Identification  
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Product ID:THORIUM-232

MSDS Date:01/01/1987

FSC:6665

NIIN:01-247-7284

MSDS Number: CCCGJ

=== Responsible Party ===

Company Name:OAK RIDGE NATIONAL LABORATORY

City:OAK RIDGE

State:TN

Country:US

Info Phone Num:215-343-5900 FAX: 215-343-4670

CAGE:NO290

=== Contractor Identification ===

Company Name:AT

OMIC ENERGY COMMISSION - OAK RIDGE

CAGE:81924

Company Name:NUCLEAR RESEARCH CORP

Address:125 TITUS AVE

Box:H

City:WARRINGTON

State:PA

ZIP:18976-2424

Country:US

CAGE:96696

Company Name:OAK RIDGE NATIONAL LABORATORY

City:OAK RIDGE

State:TN

Country:US

Phone:215-343-5900 FAX: 215-343-4670

CAGE:NO290

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Composition/Information on Ingredients  
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Ingred Name:THORIUM 232 (0.03 MICOCURIES OR 30 NANOCURIES)

Other REC Limits:NONE RECOMMENDED

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Hazards Identif

ication =====

Routes of Entry: Inhalation:UNKNOWN Skin:YES Ingestion:YES

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:ACUTE: SKIN-RADIOACTIVE EXPOSURE OF BARE SKIN CAN RESULT FOR PROLONGED EXPOSURE. INGESTION-RADIOACTIVE EXPOSURE OF INTERNAL ORGANS CAN RESULT FROM INGESTION OF METAL. CHRONIC EFFECTS/CARCINOGENICITY: PROLONGED EXPOSURE CAN BE CARCINOGENIC.

Explanation of Carcinogenicity:EXPOSURE TO RADIOACTIVITY OVER EXTENDED

PERIODS OF TIME MAY CAUSE VARIOUS FORMS OF CANCER.

Effects of Overexposure:NONE SPECIFIED BY MANUFACTURER.

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:NONE SPECIFIED BY MANUFACTURER. DLA-HMIS: GET VICTIM TO PHYSICIAN OR EMERGENCY ROOM IMMEDIATELY. BE SURE AND TELL MEDICAL PERSONNEL THAT POSSIBLE RADIOACTIVITY/RADIATION IS INVOLVED.

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

Flash Point:NONE

Lower Limits:NONE

Upper Limits:NONE

Extinguishing Media:NONE SPECIFIED BY MANUFACTURER. DLA-HMIS: MEDIA APPROPRIATE FOR SURROUNDING FIRE.

Fire Fighting Procedures:AS A MINIMUM; RESPIRATORY PROTECTION FOR FIRE FIGHTING OPERATIONS INVOLVING LARGE AMOUNTS OF SOURCE MATERIAL AS THE SMOKE MAY BE RADIOACTIVE.

Unusual Fire/Explosion Hazard:NONE SPECIFIED BY MANUFACTURER.

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

Spill

Release Procedures:MOVE UNDAMAGED PACKAGES FROM THE SPILL AREA. PICK-UP MATERIAL. DECONTAMINATE THE SPILL AREA.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:KEEP IN STORAGE CONTAINER WHEN NOT IN USE. DO NOT TOUCH CHECK SOURCE WITH BARE HAND.

Other Precautions:NONE SPECIFIED BY MANUFACTURER.

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

Respiratory Protecti

on:NONE NORMALLY REQUIRED.  
Ventilation:NONE NORMALLY REQUIRED.  
Protective Gloves:NONE NORMALLY REQUIRED.  
Eye Protection:NONE NORMALLY REQUIRED.  
Other Protective Equipment:NONE NORMALLY REQUIRED.  
Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.  
Supplemental Safety and Health

THIS CHECK SOURCE IS PROVIDED WITH ION CHAMBER, P/N C-7757. THIS ION CHAMBER IS FOUND ON RADIACMETER, P/N SM400, NSN 6665-01-157-3780. REFERENCE DATA/LITERATURE-T.O. 11H4-7-15-1. MFR REP, MR. TERRY SCHWAGER, 16 OCT 1996 STATED THAT THERE IS NO MSDS REQUIRED BUT ONE PROVIDED FOR INFO ONLY.

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

HCC:A2  
Boiling Pt:B.P. Text:8132F,4500C  
Spec Gravity:18.95  
Solubility in Water:INSOLUBLE.  
Appearance and Odor:THORIUM METAL FOUND IN CHECK SOURCE PROVIDED WITH ION CHAMBER (P/N C-7757).

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

Stability Indicator/Materials to Avoid:YES  
AVOID CONTACT WITH CHLORINE, SULFUR, PHOSPHORUS AND CONCENTRATED ACIDS.  
Stability Condition to Avoid:NONE  
Hazardous Decomposition Products:NONE  
Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

Waste Disposal Methods:DISPOSE OF IAW LOCAL, STATE & FEDERAL ENVIRONMENTAL REGULATIONS (TITLE 10 CFR). DOD PERSONNEL-REMOVE CHECK SOURCE & DISPOSE OF THROUGH YOUR SERVICE LOW LEVEL RADIOACTIVE WASTE SOURCE POC; THEN TURN IN IONIZATION CHAMBER W/O CHECK SOURCE TO DRMO.

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