SECTION I - PRODUCT IDENTIFICATION
Tantalum metal, pieces

MANUFACTURER NAME AND ADDRESS:
Kurt J. Lesker Co
P.O. Box 10
1925 Route 51
Clairton, PA 15025

UPC/EAN: 231-135-5
SYNONYMS
Tantalum metal, tantalum, tantalum-181

CHEMICAL FAMILY: Metal

DOT HAZARD LABEL: No data.

FORMULA: Ta

MOLECULAR WEIGHT: 180.95

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION
Tantalum metal, pieces

HAZARDOUS COMPONENTS (CHEMICAL NAME)
NAME: Tantalum metal
CAS #: 7440-25-7
OSHA PEL: 5 mg/m3
OTHER LIMITS: NE
SEC.302 (EHS): No
SEC.313: No

NAME: See SECTION IX-ADDITIONAL COMMENTS FOR COSHH Regulations
CAS #: NA
OSHA PEL: No data.
OTHER LIMITS: No data.
SEC.302 (EHS): No
SEC.313: No

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS
Tantalum metal, pieces

PHYSICAL STATES: [ ] Gas, [ ] Liquid, [ X ] Solid
BOILING POINT: 5325.00 °C (9617.0 °F) to 5525.00
MELTING POINT: 2996.00 °C (5424.8 °F)
SPECIFIC GRAVITY (WATER = 1): 16.6 at 20.0 °C (68.0 °F)
DENSITY: No data.
VAPOR PRESSURE (VS. AIR OR MM HG): 0 at 20.0 °C (68.0 °F)
VAPOR DENSITY (VS. AIR = 1): No data.
EVAPORATION RATE (VS BUTYL ACETATE=1): No data.
SOLUBILITY IN WATER: insoluble
PERCENT VOLATILE: N.A.
PH: No data.

APPEARANCE AND ODOR
Black, steel-blue, platinum metal pieces, no odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA
Tantalum metal, pieces

FLASH PT: N.A.  METHOD USED: NON-FLAMMABLE
EXPLOSIVE LIMITS: LEL: NA UEL: NA
EXTINGUISHING MEDIA

Use powdered graphite, dolomite, or sodium chloride. Do not use water.

SPECIAL FIRE FIGHTING PROCEDURES

Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.

UNUSUAL FIRE AND EXPLOSION HAZARDS

SECTION V - REACTIVITY DATA
Tantalum metal, pieces

STABILITY: Unstable [ ] Stable [ X ]
CONDITIONS TO AVOID - INSTABILITY

None

INCOMPATIBILITY - MATERIALS TO AVOID

Strong oxidizing agents, bromine trifluoride, fluorine, lead chromate, fused alkalis, dilute hydrofluoric acid.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

Tantalum oxide

HAZARDOUS POLYMERIZATION: Will occur [ ] Will not occur [ X ]
CONDITIONS TO AVOID - HAZARDOUS POLYMERIZATION
SECTION VI - HEALTH HAZARD DATA
Tantalum metal, pieces

ROUTE(S) OF ENTRY: Inhalation? Yes , Skin? Yes , Eyes? Yes , Ingestion? Yes , Other: N

HEALTH HAZARDS (ACUTE AND CHRONIC)

INHALATION:
Acute: Powders or dust may cause irritation to the respiratory tract and mucous membrane.
Chronic: No chronic health effects recorded.

INGESTION:
Acute: No acute health effects recorded.
Chronic: No chronic health effects recorded.

SKIN:
Acute: Powders or dust may cause abrasive irritation.
Chronic: No chronic health effects recorded.

EYE:
Acute: Powders or dust may cause abrasive irritation.
Chronic: No chronic health effects recorded.

TARGET ORGANS: May affect the respiratory system.

CARCINOGENICITY: NTP? No , IARC Monographs? No , OSHA Regulated? No
CARCINOGENICITY/OTHER INFORMATION
No data available.
RECOMMENDED EXPOSURE LIMITS: See "Section II" LD 50/LC 50: imp-rat TDLO: 3760
mg/kg; ETA

SIGNS AND SYMPTOMS OF EXPOSURE

INHALATION: May cause a red, dry throat, sneezing, coughing and difficulty breathing.

INGESTION: No acute or chronic health effects recorded.

SKIN: May cause redness and itching.

EYE: May cause redness, itching and watering.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Pre-existing respiratory disorders.

EMERGENCY AND FIRST AID PROCEDURES

INHALATION: Remove victim to fresh air; keep warm and quiet; give oxygen if breathing is difficult and seek medical attention if symptoms persist.

INGESTION: Give 1-2 glasses of milk or water and induce vomiting: Never induce vomiting or give anything by mouth to an unconscious person.
SKIN: Remove contaminated clothing; brush material off skin; wash affected area with mild soap and water; seek medical attention if irritation persists.

EYE: Flush eyes with lukewarm water, lifting upper and lower eyelids, for at least 15 minutes. Seek medical attention if irritation persists.

NOTE TO PHYSICIAN
No data available.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE
Tantalum metal, pieces

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Wear appropriate respiratory and protective equipment specified in section VIII-control measures. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for proper disposal. Take care not to raise dust.

WASTE DISPOSAL METHOD

Dispose of in accordance with local, state and federal regulations.

HAZARD LABEL INFORMATION:

Store in cool, dry area  Store in tightly sealed container
Wash thoroughly after handling

PRECAUTIONS TO BE TAKEN IN HANDLING

None

PRECAUTIONS TO BE TAKEN IN STORING

None

OTHER PRECAUTIONS

None

SECTION VIII- CONTROL MEASURES
Tantalum metal, pieces

PROTECTIVE EQUIPMENT SUMMARY - HAZARD LABEL INFORMATION:

NIOSH approved respirator  Impervious gloves  Safety glasses
Clothes to prevent skin contact

RESPIRATORY EQUIPMENT (SPECIFY TYPE)
NIOSH - approved respirator

VENTILATION

Local Exhaust: Local exhaust ventilation may be necessary to control any air contaminants to within their PELs or TLVs during the use of this product.
Special: None
Mechanical (Gen): Good general ventilation is recommended.
Other: None

EYE PROTECTION
Safety glasses

PROTECTIVE GLOVES

Rubber gloves

OTHER PROTECTIVE CLOTHING

Protective gear suitable to prevent contamination

WORK/HYGIENIC/MAINTENANCE PRACTICES

Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.

SECTION IX - ADDITIONAL COMMENTS

Tantalum metal, pieces

Control of Substances Hazardous to Health Regulations

EH40 Occupational Exposure Limits

Maximum Exposure Limit: NE

Occupational Exposure Standard: 5 mg/m³

10 mg/m³ Short-term Exposure Limit

<table>
<thead>
<tr>
<th>HMIS HAZARD RATINGS:</th>
<th>OTHER HAZARD RATINGS:</th>
<th>Minimal: 0</th>
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<tbody>
<tr>
<td>Health: 1</td>
<td>Health: 1</td>
<td>Slight: 1</td>
</tr>
<tr>
<td>Flammability: 0</td>
<td>Flammability: 0</td>
<td>Moderate: 2</td>
</tr>
<tr>
<td>Reactivity: 0</td>
<td>Reactivity: 0</td>
<td>Serious: 3</td>
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<tr>
<td>Protection: B</td>
<td>Special Hazard: B</td>
<td>Extreme: 4</td>
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DOT HAZARD CLASS: 4.1

DOT HAZARD LABEL: No data.

UN/NA NUMBER: 3089

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Abbreviations used: NA=Not Applicable NE: Not Established