

ISSUE DATE: April 23, 1999

DLA-TANTALUM METAL, CAPACITOR GRADE-001

SOLICITATION OF OFFERS FOR TANTALUM METAL



*Defense National Stockpile Center
8725 John J. Kingman Road
Fort Belvoir, VA 22060-6223*

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SECTION A - SOLICITATION

A.1 Introduction (JAN 95)

a. The Defense Logistics Agency (DLA), Defense National Stockpile Center (DNSC), is soliciting offers for the sale of approximately 25,000 pounds contained of tantalum metal, capacitor grade (LBTa) in Fiscal Year 1999. The initial offering will be held on May 11, 1999 at 10:30 AM, local time, Ft. Belvoir, VA. If all material is not sold, subsequent offerings will be held on a quarterly basis on the second Tuesday of the second month of the quarter beginning on August 10, 1999. Offers must be received at the address in Section **B.2.a.** by 10:30 AM, local time, Ft. Belvoir, VA. **In the event a day scheduled for receipt of offers is a holiday or DNSC is otherwise closed at the time set, offers for that day will be received at 10:30 AM, local time, Ft. Belvoir, VA on the next DNSC business day.**

c. Delivery is F.O.B. carrier's conveyance. The Government will assist with outloading. (See **F.1.d.**)

A.2 Description (JAN 95)

a. The tantalum metal, capacitor grade listed in Section **I.2** is in the form of powder, ingot and slab. The powder is divided into Grades 1 through 5 based on the powder's oxygen content, bulk density, particle size, range of sintering time and electrical properties. The ingots and slabs are Grades 6 and 7 respectively. The powder is packed in one quart, wide mouth, screw-top bottles made of polyethylene. Each bottle holds ten pounds and twelve bottles are packed in each wooden case. The net weight of each case is approximately 120 pounds. The ingots weigh more than 50 but less than 250 pounds each with a maximum diameter of 5 inches and a minimum length of 12 inches. Slabs are between 2 inches by 5 inches by 13 inches and 2 inches by 10 inches by 26 inches. Each ingot or slab has been placed in a polyethylene bag and each bag is packed in a wooden box. No wooden box exceeds 500 pounds in weight. Section **J.1** in National Stockpile Purchase Specification P-101-R4 provides additional information. The material is stored in Clearfield, UT, Anniston, AL and New Haven, IN.

b. Government analyses indicate that the material conforms to the data listed in Paragraph **A.2.a**, Section **I.2**, and Section **J.1**; however, no warranty or guarantee is made that the material so conforms or that it will be suitable for any particular purpose.

SECTION B – PREPARATION AND SUBMISSION OF OFFERS

B.1 Submittals (JAN 95)

Offerors shall submit **all** of the following documents along with the offer unless otherwise noted:

a. Section I.1 Sale of Government Property Negotiated Sales Contract (JUL 97) with the section entitled “Execution by Contractor” completed.

b. Section I.2 Item Offer Page(s) – DLA-TANTALUM METAL, CAPACITOR GRADE-001 (MAR 99) with (1) unit price column; (2) total offered price column; (3) company name; (4) signature and date; (5) name and title; and (6) telephone number and fax number blocks completed.

c. Representations, Certifications and Identifications at Section I.3 through I.10. Offerors please note: If Annual Representations, Certifications and Identifications have previously been submitted they need not be resubmitted.

d. Any other terms the Offeror wishes to negotiate. (See Section **B.6.c**)

B.2 General Information (JUL 97)

a. Facsimile offers and modifications will be accepted in accordance with Section **B.5**. Offers may also be submitted by mail or hand delivered enclosed in a sealed envelope and addressed to:

ATTN: DNSC-L (Bid Custodian)
Defense National Stockpile Center
8725 John J. Kingman Road
Suite 4616 (Mail) or Suite 4528 (Hand Delivered)
Fort Belvoir, Virginia 22060-6223
Facsimile No. (703) 767-5541

Place the name and address of the Offeror in the upper left corner and the following information in the lower left corner on the face of the envelope:

SOLICITATION OF OFFERS
DLA-TANTALUM METAL, CAPACITOR GRADE-001

b. The Offeror agrees, if its offer is accepted by the Government within fifteen (15) working days from the date specified in the Solicitation for receipt of offers, to purchase any or all material on which offers are made at the price offered and to take delivery of the material within the time specified in the executed **Section I.1 Sale of Government Property Negotiated Sales Contract (JUL 97)**.

c. Unless a designation of agent is on file at DNSC, an Offeror submitting an offer as agent for another party shall submit written proof, either prior to or with the offer, that it is authorized to act as agent and shall tender the offer in the name of the principal.

B.3 Minimum Quantity (JAN 95)

The minimum offer quantity is one complete line item.

B.4 Late Submissions, Modifications, and Withdrawals of Offers (MAR 98)

a. Any offer received at the office designated in the solicitation after the exact time specified for receipt of offers will not be considered unless it is received before award is made and—

(1) It was sent by registered or certified mail not later than the fifth calendar day before the date specified for receipt of offers (e.g., an offer submitted in response to a solicitation requiring receipt of offers by the 20th of the month must have been mailed by the 15th);

(2) It was sent by mail (or telegram or facsimile, if authorized) or hand-carried (including delivery by a commercial carrier) if it is determined by the Government that the late receipt was due primarily to Government mishandling after receipt at the Government installation;

(3) It was sent by U.S. Postal Service Express Mail Next Day Service-Post Office to Addressee, not later than 5:00 p.m. at the place of mailing two working days prior to the date specified for receipt of offers. The term “working days” excludes weekends and U.S. Federal holidays; or

(4) It was transmitted through an electronic commerce method authorized by the solicitation and was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of offers.

(5) There is acceptable evidence to establish that it was received at the activity designated for receipt of offers and was under the Government’s control prior to the time set for receipt of offers, and the Contracting Officer determines that accepting the late offer would not unduly delay the sale; or

(6) It is the only offer received.

b. Notwithstanding paragraph a. of this provision, the only acceptable evidence to establish the time of receipt of a facsimile bid transmitted to a number other than that listed in Section **B.5** is the time/date stamp manually recorded by Government personnel, other documentary evidence maintained by the installation, or oral testimony or statements of Government personnel. In no event will the time/date annotated by a facsimile machine located at a number other than that listed in Section **B.5** be acceptable evidence to establish the timeliness of the offer.

c. Any modification of an offer, including a modification resulting from the Contracting Officer’s request for “best and final” offer, is subject to the same conditions as in subparagraphs a.(1) through a.(5) of this provision.

d. The only acceptable evidence to establish the date of mailing of a late offer or modification sent either by U.S. Postal Service registered or certified mail is the U.S. or

Canadian Postal Service postmark both on the envelope or wrapper and on the original receipt from the U.S. or Canadian Postal Service. Both postmarks must show a legible date or the offer or modification shall be processed as if mailed late. "Postmark" means a printed, stamped, or otherwise placed impression (exclusive of a postage meter machine impression) that is readily identifiable without further action as having been supplied and affixed by employees of the U.S. or Canadian Postal Service on the date of mailing. Therefore, offerors should request the postal clerk to place a legible hand cancellation bull's eye postmark on both the receipt and the envelope or wrapper.

e. Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the offer wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

f. The only acceptable evidence to establish the date of mailing of a late offer, modification, or withdrawal sent by Express Mail Next Day Service-Post Office to Addressee is the date entered by the post office receiving clerk on the "Express Mail Next Day Service-Post Office to Addressee" label and the postmark on both the envelope or wrapper and on the original receipt from the U.S. Postal Service. "Postmark" has the same meaning as defined in paragraph d. of this provision, excluding postmarks of the Canadian Postal Service. Therefore, offerors should request the postal clerk to place a legible hand cancellation bull's eye postmark on both the receipt and the envelope or wrapper.

g. Notwithstanding paragraph a. of this provision, a late modification of an otherwise successful offer that makes its terms more favorable to the Government will be considered at any time it is received and may be accepted.

h. Offers may be withdrawn by written notice or telegram (including mailgram) received at any time before award. If the solicitation authorizes facsimile offers, offers may be withdrawn via facsimile received at any time before award, subject to the conditions specified in the provision entitled "Facsimile Submissions". Offers may be withdrawn in person by an offeror or an authorized representative, if the representative's identity is made known and the representative signs a receipt for the offer before award.

i. If an emergency or unanticipated event interrupts normal Government processes so that offers cannot be received at the office designated for receipt of offers by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation or other notice of an extension of the closing date, the time specified for receipt of offers will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume. If no time is specified in the solicitation, the time for receipt is 4:30 p.m., local time, for the designated Government office.

B.5 Facsimile Submissions (JUL 97)

Facsimile offers and modifications will be accepted any time prior to the exact time set for receipt of offers. Facsimile withdrawals will be accepted any time before award.

Offerors must use the facsimile number: (703) 767-5541.

a. Definition: "Facsimile submission," as used in this Solicitation, means an offer, modification of an offer, or withdrawal of an offer that is transmitted to and received by the Government via electronic equipment that communicates and reproduces both printed and handwritten material.

- b.** Offerors may submit facsimile submissions as responses to this Solicitation. These responses must arrive at the place, and by the time, specified in the Solicitation.
- c.** Facsimile submissions that fail to furnish required representations or information, that reject any of the terms, conditions, and provisions of the Solicitation, that contain garbled information, or are otherwise incomplete, may be excluded from consideration.
- d.** Facsimile submissions must contain the required signatures.
- e.** The Government reserves the right to make award solely on the facsimile submission. However, if requested to do so by the Contracting Officer, the apparently successful Offeror agrees to promptly submit the complete original signed submission.
- f.** If the Offeror chooses to transmit a facsimile submission, the Government will not be responsible for any failure attributable to the transmission or receipt of the facsimile submission including, but not limited to, the following:

- (1) Receipt of garbled or incomplete submission.
- (2) Availability or condition of the receiving facsimile equipment.
- (3) Incompatibility between the sending and receiving equipment.
- (4) Delay in transmission or receipt of submission.
- (5) Failure of the Offeror to properly identify the submission.
- (6) Illegibility of submission.
- (7) Security of submission data.

B.6 Consideration of Offers (FEB 98)

- a.** The Government reserves the right to --
- (1) Reject any or all offers;
 - (2) Waive any informalities and minor irregularities in an offer;
 - (3) Award a quantity less than the quantity offered on at the unit price offered;
 - (4) Accept any one item or group of items in an offer, as may be in the best interest of the Government.
 - (5) Award quantities in excess of that stated as being available for sale.
- b.** Offerors may submit multiple offers at various unit prices and may specify a maximum quantity.

c. The Government may request specific pricing documentation to support the offer submitted. Failure to provide the documentation, if requested, may result in the Offeror being ineligible for award. Pricing data will be treated as proprietary and will not be released by the Government.

d. "All or none" offers will not be considered.

B.7 Evaluation of Offers (MAR 98)

a. General - The evaluation factors are listed below in descending order of importance:

- (1) Unit price.
- (2) Payment terms.
- (3) Removal schedule.

All evaluation factors other than unit price, when combined, are significantly less important than unit price.

b. To be considered, offers must meet the following minimum requirements:

- (1) Submission of the information requested in Section **B.1**;
- (2) Submission of pricing which complies with the provisions of Section **B.3**;
- (3) Compliance with Section **B.6.d**.

c. Requests for payment terms will be considered only from offerors with a satisfactory performance and payment record with DNSC and a satisfactory current Dun & Bradstreet Report. The maximum acceptable payment term is Net 30 days.

B.8 Negotiation Procedures (JUL 97)

The Government intends to evaluate offers and award a contract after conducting discussions with all offerors whose offers have been determined to be within the competitive range. However, the Government reserves the right to award without discussions. Accordingly, offerors are advised to include their best possible terms in their initial offer.

If the Government determines that holding discussions is in its best interest, the following procedure will be utilized:

a. **Competitive Range** - The competitive range shall be determined on the basis of price and other factors that are stated in the solicitation and will include all offers which comply with Section **B.8.b** that have a reasonable chance of being selected for award. Offers not included in the competitive range will not be given further consideration.

b. **Negotiations/Discussions** - Only offerors within the competitive range will be contacted to schedule the day and time for discussions to be conducted. Negotiations will be conducted only with the company official signing **Section I.1 Sale of Government Property Negotiated Sales Contract (JUL 97)** or a specifically authorized individual identified in **Section I.8 Authorized Negotiators (JUN 95)**. The content and extent of the discussions is a matter of the Contracting Officer's judgment, based on the particular facts of the sale and each offeror's initial offer.

c. Discussion Session - Only one discussion session per offeror is intended. In order to facilitate meaningful discussions, offerors should:

(1) Be prepared to discuss:

- (A) Only those prices and terms included in the initial offer;
- (B) Supporting documentation and justification for the derivation of prices offered;
- (C) Payment terms;
- (D) Removal schedule; and

(2) Arrange to have appropriate support personnel present during discussions, i.e., Purchasing, Marketing, etc.

d. Best and Final Offer Requests - At the conclusion of discussions, all offerors with which discussions were conducted will be requested to submit a best and final offer (BAFO). Oral requests for best and final offers will be confirmed in writing. Each individual BAFO request will include the following:

- (1) Notice that discussions are concluded;
- (2) Time and date by which BAFOs must be submitted;
- (3) Notice that BAFOs are subject to Section **B.4 Late Submissions, Modifications, and Withdrawals of Offers (MAR 98)**;
- (4) A record of negotiated issues and understandings between the Government and the offeror (as applicable);
- (5) A list of remaining questions/deficiencies (if any);
- (6) A caution to offerors to provide supporting documentation for any changes to their prior offers as revised during discussions; and
- (7) Notice that the Government intends to evaluate best and final offers and award a contract without further discussions.

e. Best and Final Offer Responses - BAFOs should strictly conform to the best and final offer request. If no response is received to the BAFO request, the initial offer will be considered as the best and final offer. Changes which are not fully supported by documentation may not be evaluated or considered.

f. Subsequent Discussions/BAFO Requests - Generally, only one best and final offer will be requested. After receipt of best and final offers, discussions will not be reopened unless the Government determines it is in its best interest to do so. If discussions are reopened, an additional request for best and final offers will be issued to all offerors still within the competitive range.

B.9 Disclosure of Information (DEC 97)

Proprietary or confidential information disclosed in offers/discussions/BAFOs will not be disclosed to the public or used by the Government except for evaluation purposes.

B.10 Responsibility Determination (JUN 95)

No award shall be made unless the Contracting Officer makes an affirmative determination of responsibility. To be determined responsible, an Offeror shall, at a minimum, have adequate financial resources, a satisfactory performance record, and a satisfactory record of integrity and ethics. For example, an Offeror may be determined to be non-responsible and therefore ineligible for award if there is a record of poor payment (e.g., checks returned for insufficient funds) or poor performance (e.g., failure to pay for or remove material on time).

B.11 Contract Award (JUL 97)

A written award or acceptance of an offer signed by the Contracting Officer and furnished to a successful Offeror within the time specified for acceptance shall result in a binding contract incorporating all the terms and conditions of this Solicitation unless otherwise stated in the executed Section **I.1 Sale of Government Property Negotiated Sales Contract (JUL 97)**.

B.12 Unsuccessful Offerors (FEB 98)

Award will be made with reasonable promptness to the successful offeror(s). The Contracting Officer will notify unsuccessful offeror(s) at the earliest practicable time of the basis for non-award.

SECTION C – INSPECTION (JUN 98)

a. An offeror may, at its own expense, visually inspect the material at the New Haven, IN storage location . **No sampling of the material will be permitted.**

b. Requests for an appointment to visually inspect the material at the New Haven, IN storage depot must be made in writing or by facsimile submission on company letterhead to the Point of Contract identified in **Section J.2 Storage Locations** , at least **ten (10)** working days prior to the date of the requested inspection. Requests shall include the name and title of each individual wishing to visually inspect the material. Offerors will be notified by telephone of the date the material will be available for inspection. The Government reserves the right to limit the number of individuals granted access to the depot.

c. Offerors, their agents and representatives shall comply at all times with the rules of the storage location.

SECTION D - PAYMENT

D.1 Payment (FEB 98)

a. Payment shall be made in U.S. dollars.

b. Payment shall be made by wire transfer, U.S. Postal Service money order, or company or bank check.

(1) Wire transfer payment shall be made in accordance with instructions in **Section J.5**. Fees for wire transfers are the responsibility of the Contractor. If payment is by wire transfer and the wrong account number is used, shipment of material may be delayed by up to one week or the wire transfer may be returned to the sender.

(2) All checks must be drawn on a U.S. domestic bank or on the United States branch of an acceptable foreign bank and must be payable in United States currency. **A service charge of \$100.00 will be applied to all returned checks.**

c. Payment shall be made to the **Defense Finance and Accounting Service - Columbus (DFAS-Columbus)**. If a check is not made payable to DFAS-Columbus, the check may be returned and the \$100.00 fee stated in **D.1.b.** charged. Payment shall be accompanied by **identifying information including the contract number, invoice number, and a description of the material purchased**. Payments without the required identification may be returned and shipment delayed. Payments shall be sent to:

ATTN: DNSC-DF, Accounts Receivable
Defense National Stockpile Center
8725 John J. Kingman Road
Suite 4616 (Mail) or Suite 4528 (Hand Delivered)
Fort Belvoir, VA 22060-6223

d. Invoices issued for adjustments for variations in quantity or weight, storage charges, or interest shall be paid promptly.

e. If payment is not made in full within 30 calendar days of issuance of an invoice, the Government will issue a "demand" letter, demanding payment of the outstanding amount. If all moneys due are not paid within 30 calendar days after the date of the Government's demand letter, the Contractor will be considered delinquent and any outstanding charges will be reduced by any subsequent payments. No material will be released until all delinquent charges are paid. (See Sections **F.1.a.** and **G.10.**)

D.2 Payment Due Date (JUL 97)

a. Unless otherwise specified in the contract, payment shall be made before shipment of material and before the time specified in the executed **Section I.1 Sale of Government Property Negotiated Sales Contract (JUL 97)**. If payment is not received by 11:00 a.m., local time, on the payment due date, payment will not be credited until the next Government business day. Interest and storage charges will accrue accordingly.

b. In the event the payment due date falls on a Saturday, Sunday, or holiday, then the payment due date will be extended to the next Government business day.

D.3 Interest (JUL 97)

a. All amounts that become payable by the Contractor to the Government under this contract shall bear simple interest from the date due until paid. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in 41 U.S.C. 611, which is applicable to the period in which the amount becomes due, as provided in paragraph **b.**, below.

b. Amounts shall be due at the earliest of the following dates:

(1) The final day of the contract period specified in Section **I.1 Sale of Government Property Negotiated Sales Contract (JUL 97)**; or

(2) The date of the first written demand for payment under the contract.

SECTION E - REMOVAL

E.1 Removal of Material (FEB 98)

a. The contract period is based on the quantity of material awarded and begins on the date of contract award. The contract period is as follows:

Quantity (Unit)	Contract period in Calendar Days
0 to 25,000 LBTa	30 Days

b. If the Contractor fails to pay for and remove the material in accordance with the schedule specified in the contract, the Contractor will be considered delinquent and no material will be shipped until payment has been made.

c. The contract period includes Saturdays, Sundays, and holidays. If the last day of the contract period is a Saturday, Sunday, or holiday, or the storage location is otherwise closed that day, the period of contract performance will be extended to the next Government workday.

E.2 Storage Charges (JUL 97)

a. Storage charges shall be assessed on all material remaining after the last day of the contract period. The Government reserves the right to remove any remaining material to a commercial storage facility and be reimbursed by the Contractor for any expenses incurred. Storage charges continue to accrue until all the material has been removed or the contract is terminated for default, in which case the Contractor will be liable for damages, as set forth in Section **G.7 Default** of the Solicitation..

b. The storage charge is the greater of the following: (1) **\$0.003 per pound** (if a fraction of a pound remains, the charge will be for a full pound) per 30 day period regardless of whether the material remains in storage a period of 30 days or less than 30 days; or (2) commercial storage charges, if applicable.

c. Storage charges will be invoiced upon shipment. Payment shall be made promptly.

d. Payment of storage charges shall not relieve the Contractor of its obligation to remove the material in a timely manner. Acceptance of storage payments by the Government is not a waiver of the Government's right to default the Contractor for failure to remove the material (See Section **G.7 Default**).

SECTION F - SHIPPING

F.1 Request for Shipment (JUN 97)

a. Delivery is F.O.B. carrier's conveyance. At least five (5) working days prior to the date shipment is required to commence the Contractor shall furnish to the designated depot commercial bills of lading. Simultaneously the Contractor shall complete and fax the form in Section **J.3 Shipping Instructions (JAN 95)** to the Contracting Officer. The Government will only accept shipping instructions from those individuals designated in Section **I.9** as being authorized to release material on behalf of the Contractor. **No material will be released until all outstanding delinquent charges and payments have been satisfied.**

b. "Shipping Instructions" shall include the following:

- (1) Quantity of material to be released.
- (2) Designation of type and kind of conveyance.
- (3) Name of the carrier (please include a telephone number where this contact can be reached).
- (4) "Ship to" location.
- (5) Minimum load per conveyance (optional)
- (6) Desired shipping schedule.
- (7) Name and telephone number of an agent who can furnish additional shipping information if needed.
- (8) Any additional pertinent information.

c. The shipping schedule shall allow sufficient time for the Government to reasonably meet such schedule prior to the last day of the contract period commensurate with existing loading facilities and other commitments at the Government's storage locations. Information regarding Government commitments may be obtained from the address specified in Section **J.2**.

d. Outloading will be accomplished by truck. The Government will provide lumber and nails from available depot stock if requested by the Contractor's designee/driver. The Contractor's designee shall perform any necessary procedure(s) to ensure the cargo is safely secured prior to leaving the depot. The Government will not block, chock, brace, lash, band, or in any manner secure the cargo on the Contractor's conveyance(s). The designee shall witness the loading. Any expenses over and above those normally incurred by the Government to meet the public carrier's requirements for loading like materials will be at the expense of the Contractor.

e. The Contractor, its agent and employees shall comply with all applicable rules at the storage depot; Federal, state and local load limitations; and all safety, health, and environmental requirements.

f. Requests for shipment shall be for a minimum of one line item. Shipping instructions and information requested in paragraph a., above, are to be furnished to the following address:

Defense National Stockpile Center
ATTN: (Insert Commodity Name) Contracting Officer
8725 John J. Kingman Road
Suite 4616 (Mail) or Suite 4528 (Hand delivered)
Ft. Belvoir, VA 22060-6223
Facsimile Number: (703) 767--5504

g. The Contractor shall pay \$100.00 per day if the Contractor's conveyance fails to report to an unstaffed location as scheduled. See Section J.2 for identification of unstaffed locations.

h. The Government shall determine the order in which the material is scheduled, coordinated, and outloaded.

F.2 Insurance Requirements (APR 95)

The Contractor shall procure and maintain, and require any subcontractor to procure and maintain, during the entire period of performance under this contract, such insurance as stipulated herein.

a. Workers' compensation and employer's liability. The Contractor is required to comply with applicable Federal and State workers' compensation and occupational disease statutes. Employer's liability coverage of at least \$100,000 is required, except in States with exclusive or monopolistic funds that do not permit workers' compensation to be written by private carriers.

b. General liability. Bodily injury liability insurance coverage written on the comprehensive form of policy of at least \$500,000 per occurrence.

c. Automobile liability insurance written on the comprehensive form of policy is required. The policy shall provide for bodily injury and property damage liability covering the operation of all automobiles used in connection with performing the contract. Policies covering automobiles operated in the United States shall provide coverage of at least \$200,000 per person and \$500,000 per occurrence for bodily injury and \$20,000 per occurrence for property damage. The amount of liability coverage on other policies shall be commensurate with any legal requirements of the locality and sufficient to meet normal and customary claims.

F.3 Weighing (JAN 95)

a. No outweighing of material will be performed by the Government. The Government weights of record shall govern. The Contractor may elect to have a representative present to witness the outloading.

b. Weight certificates shall be provided at the expense of the Government. Outbound Storage Reports will be issued by the Government and will be final for payment purposes.

c. In the event that any broken containers are detected at time of shipment, these will be overpackaged by the Government at the Government's expense prior to outloading. If no loss is discernible, the weight of record with the Government shall govern for that item and shall be final for payment.

F.4 Weight Discrepancy (JAN 95)

a. If the Contractor's weights for the material delivered vary from the Government's certified weights by more than one-half of one percent, the Contractor may give notice of such difference to the Contracting Officer within two working days (exclusive of Saturdays, Sundays, and Government holidays) after receipt of the material at destination, requesting that the material be reweighed. In that case, the Contractor shall segregate the shipment in question and hold it intact pending reweighing. The entire shipment shall be reweighed by the Contractor at its expense, in

the presence of and in the manner approved by a Government representative, using scales approved by the Government representative. If the weight varies from the Government's certified weight by greater than one-fourth of one percent, plus or minus, that weight shall govern for payment purposes. If the weight determined by reweighing does not vary from the Government's certified weight by greater than one-fourth of one percent, plus or minus, the Government's certified weight shall be final for payment purposes.

b. No adjustment shall be considered or made in accordance with the above paragraph unless notice is given by the Contractor to the Contracting Officer within the time specified above and all other requirements of the paragraph are complied with.

F.5 Assumption of Risk and Disclaimer of Liability (JUL 97)

The Contractor, its assigns or agents, assumes full responsibility for all injury or damage to persons or property occasioned by or occurring in connection with or incident to any use or possession of this material. The Government assumes no liability for any damages to the property of the Contractor or any other person or property, or for any personal injury, illness, disability or death to the Contractor, Contractor's employees or any other person subject to Contractor's control, or for any other consequential damages arising from or incident to the purchase, use, loading, processing, disposition, or any subsequent operation performed upon, exposure to or contact with any component, part, constituent or ingredient of this item, material or substance.

F.6 Adjustment for Variation in Quantity or Weight (JAN 95)

The Government reserves the right to vary the quantity or weight delivered by one percent from the quantity or weight listed in the Solicitation and the Contractor agrees to accept delivery of any quantity or weight within these limits. The contract price will be adjusted upward or downward in accordance with the unit price and on the basis of the quantity or weight actually delivered.

F.7 Environmental Protection (JUN 95)

a. Transportation Requirements

(1) The transportation of hazardous material is governed by Department of Transportation (DOT) Hazardous Materials Regulations (Title 49 Code of Federal Regulations, Parts 170-189). If the material being transported is covered by DOT Regulations, the Contractor or its agent is responsible for certifying to DOT that hazardous materials are properly classified, described, packaged, marked, and labeled and are in a condition safe to transport based on the Contractor's or its agent's own examination of the material. (See especially 49 CFR 173.7(a)(1).)

(2) The Government reserves the right to conduct reasonable inspection of the Contractor's or its agent's transportation conveyances or other equipment utilized to effect removal of the material purchased under this Solicitation. Inspection may occur prior to, during, or subsequent to removal of the material from Government storage locations. The Contractor or its agent shall provide Government representatives with access and any reasonable assistance required to conduct this inspection.

b. Material Safety Data Sheets

(1) Offerors are warned that unprotected exposure to hazardous substances, hazardous materials and hazardous chemicals may significantly increase the risk of health problems. The Contractor shall comply with all applicable Occupational Safety and Health Administration (OSHA) and any other Federal, state or local laws, codes, ordinances, and regulations (including obtaining any required licenses or permits) governing exposure to, and storage, handling, transportation, and disposition of, this material.

(2) Material Safety Data Sheets as required by OSHA Hazard Communication Standard - 29 CFR 1910.1200 are incorporated herein. (See Section **J.4**) This data provides specific toxicity and health related data for the protection of human health and the environment. Offerors should review this information carefully. It is the responsibility of the Contractor to further communicate this information to the distributor, manufacturer, user and/or transporter of this material as may be required by Federal regulations.

(3) Offerors shall also refer to 29 CFR 1910 Occupational Safety and Health Standards, specifically sections 1910.1000 through 1050. These occupational standards set standards for permissible exposures, methods of compliance, personal protective equipment, and other measures that must be taken when working with, or in proximity to, hazardous materials, chemicals and substances in the United States and its territories and possessions.

c. Use and Disposition

(1) The Contractor certifies that it shall use and ultimately dispose of any hazardous material purchased under this Solicitation in accordance with all applicable Federal, state, local and international laws and regulations and in a manner safe for the public and the environment.

(2) The material offered under this Solicitation is not, in its present form, subject to EPA Hazardous Waste Regulations (40 CFR Part 260, et seq.) issued under the Resource Conservation and Recovery Act. However, it is possible that use of this material will lead to the creation of a hazardous waste. 40 CFR Part 260, et seq., details the responsibilities of generators, transporters, treaters, storers, and disposers of hazardous waste. Failure to comply with these regulations can lead to civil and criminal penalties.

(3) The wood pallets or materials used to package the commodity sold under this Solicitation may have been treated with a wood preservative to protect it from insect attack and decay. These preservatives penetrate and remain in the wood for a long time and may pose certain hazards if precautions are not taken during the handling, use, and disposal of these treated wood products. Treated wood products should not be burned in open fires. Contractors are encouraged to seek advice on proper disposal from the local environmental protection agency.

SECTION G - CONTRACT ADMINISTRATION DATA

G.1 Amendments and Modifications (JAN 95)

a. Changes in terms and conditions of this Solicitation shall be accomplished by written amendment only.

b. Changes in terms and conditions of any resulting contract shall be accomplished only by written modification signed by the Contracting Officer.

G.2 Title (JAN 98)

Title to the material shall pass to the Contractor upon execution of the contract; however, removal is subject to the remaining terms and conditions of the solicitation and any resulting contract.

G.3 Risk of Loss (JAN 98)

a. Prior to the date specified for removal, the Government shall be responsible only for the exercise of reasonable care for the protection of the material.

b. After the date specified for removal, or any extension approved in writing by the Contracting Officer, all risk of loss, damage, or destruction from any cause whatsoever, shall be borne by the Contractor.

G.4 Limitation on Government's Liability (JAN 95)

a. Except as provided in paragraph b. in any case where liability of the Government to the Contractor has been established, the measure of the Government's liability shall not exceed refund of whatever portion of the purchase price the Contractor has paid.

b. Where specifically authorized in writing by the Contracting Officer, the Contractor may recover reasonable costs of packing, loading, and transportation incurred in connection with return of material to the Government.

G.5 Protests (FEB 97)

a. Companies protesting any resultant sale under this solicitation may file a protest 1) with the Contracting Officer (see paragraph d.1) , or 2) with the General Accounting Office (see paragraph e), or 3) pursuant to Executive Order 12979, with the activity for a decision at a level above the Contracting Officer (see paragraph d.2). Protests filed with the activity should be addressed to the Contracting Officer, but should clearly state that they are an "Agency Level Protest under Executive Order 12979." (This process allows for a higher level decision on the initial protest; it is not a review of a Contracting Officer's decision on a protest filed with the Contracting Officer.) Absent a clear indication of the intent to file an agency level protest, protests will be presumed to be protests to the Contracting Officer.

b. Protests Before Award

Protests before award may be filed not later than 10 calendar days after the basis of protest is known or should have been known, whichever is earlier. Protests may be filed directly with DNSC only or with the General Accounting Office (GAO).

c. Protests After Award

Protests after award shall be filed not later than 10 calendar days after the basis of protest is known or should have been known, whichever is earlier, with the exception of protests challenging a sale conducted on the basis of competitive proposals under which a debriefing is requested and, when requested, is required. In such cases, the initial protest shall not be filed before the debriefing date offered to the protester, but shall be filed not later than 10 calendar days after the date on which the debriefing is held and the basis of protest is known or should have been known, whichever is earlier. Protests must be in writing and may be filed directly with the Contracting Officer, with the DNSC or with the GAO.

d. Service of Protest

1. Protests shall be served on the Contracting Officer by obtaining written and dated acknowledgment of receipt from:

Attn: DNSC-P - (Insert name of the Contracting Officer)
Defense National Stockpile Center
8725 John J. Kingman Road
Suite 4616 (Mail) or Suite 4528 (Hand delivered)
Ft. Belvoir, VA 22060-6223

2. Protest shall be served on the DNSC for a decision at a level above the Contracting Officer by obtaining written and dated acknowledgment of receipt from:

Attn: DNSC-P, Director, Directorate of
Stockpile Contracts
Defense National Stockpile Center
8725 John J. Kingman Road
Suite 4616 (Mail) or Suite 4528 (Hand delivered)
Ft. Belvoir, VA 22060-6223

e. Receipt of Protest

A copy of the protest shall be received in the office designated above within one day of filing a protest with the GAO at the following address:

General Counsel
Attn: Procurement Law Control Group
U.S. General Accounting Office
441 G Street, NW
Washington, DC 20548

G.6 Disputes (JAN 95)

a. This contract is subject to the Contract Disputes Act of 1978 (41 U.S.C. 601-613) (the Act).

b. Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.

c. "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. A claim arising under a contract, unlike a claim relating to that contract, is a claim that can be resolved under a contract clause that provides for the relief sought by the claimant. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding \$100,000 is not a claim under the Act until certified as required by subparagraph **d.(2)** below. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this paragraph, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

d. (1) A claim by the Contractor shall be made in writing and submitted to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be by written decision of the Contracting Officer.

(2) For Contractor claims exceeding \$100,000, the Contractor shall submit with the claim a certification that-

(i) The claim is made in good faith;

(ii) Supporting data are accurate and complete to the best of the Contractor's knowledge and belief; and

(iii) The amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable.

(3) (i) If the Contractor is an individual, the certification shall be executed by that individual.

(ii) If the Contractor is not an individual, the certification shall be executed by -

(A) A senior company official in charge at the Contractor's plant or location involved; or

(B) An officer or general partner of the Contractor having overall responsibility for the conduct of the Contractor's affairs.

e. For Contractor claims of \$100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over \$100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

f. The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in the Act.

g. At the time a claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative means of dispute resolution. When using alternative dispute resolution procedures, any claim, regardless of amount, shall be accompanied by the certificate described in paragraph **d(2)** of this clause, and executed in accordance with paragraph **d(3)** of this clause.

h. The Government shall pay interest on the amount found due and unpaid from (1) the date the Contracting Officer receives the claim (properly certified if required), or (2) the date payment otherwise would be due, if that date is later, until the date of payment. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

i. The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under the contract, and comply with any decision of the Contracting Officer.

G.7 Default (JUL 97)

a. (1) The Government may, by written notice of default to the Contractor, terminate this contract in whole or in part if the Contractor fails to -

(i) Make payment and remove the material within the time specified in this contract or any extension;

(ii) Remove the material within the time specified in this contract irrespective of whether or not payment has been made;

(iii) Make progress, so as to endanger performance of this contract; or

(iv) Perform any of the other provisions of this contract.

(2) The Government's right to terminate this contract under (1)(i) through (1)(iv) above, may be exercised if the Contractor does not cure such failure within 10 days (or more if authorized in writing by the Contracting Officer) after receipt of the notice from the Contracting Officer specifying the failure. If at any time prior to the expiration of this contract, the Contractor makes it clear either by words, actions or circumstances, that the Contractor is unwilling or unable to perform under this contract, the Government shall not be required to furnish the Contractor notice specifying a failure under this contract, prior to exercising its right to terminate this contract for default and seek damages.

(3) Upon the Contractor's failure to cure such default within that period (or such further period as the Contracting Officer may allow), the Contractor shall lose all right, title and interest which it might otherwise have acquired in and to the material as to which a default has occurred.

b. If the Government terminates the contract, the Contractor shall be held liable for damages as described below. However, in no event will damages exceed the original contract price.

c. If the Government terminates the contract for default, it may subsequently resell the material for the Contractor's account, under the terms and in the manner the Contracting Officer considers appropriate, and assess the Contractor the difference between the contract price and the price obtained on resale. In no event will the Contractor be refunded any money if the

Government obtains a greater price on resale, nor will an accounting of money be made until resale is complete. In the event that the Government does not succeed in reselling the material within 12 months, the Contractor may be held liable for the full contract price for the quantity of material on which the default has occurred. In order to calculate the Government's damages on contracts where the contract price is determined on a formula-price basis, the Government will establish the contract price for the quantity of material on which the default has occurred as follows: Using the pricing mechanism set forth in Section **I.1 Sale of Government Property Negotiated Sales Contract (JUL 97)**, the Government will set the price as though the material had been priced on the last day of the contract contract period or the date of the termination notice, whichever is earlier.

d. The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

G.8 Termination for Convenience of the Government (DEC 97)

a. The Contracting Officer, by written notice, may terminate this contract, in whole or in part, when it is in the Government's interest. If this contract is terminated, the Government shall only be liable for actual costs incurred by the Contractor before the effective date of termination.

b. If a bona fide requirement for the material develops or exists prior to removal of the material from Government control, the Government may withdraw that material from the sale. In the event of a withdrawal under this condition, the Government shall be liable only for the refund of the contract price of the withdrawn material or such portion of the contract price as it may have received plus simple interest at the rate established by the Secretary of the Treasury.

G.9 Excusable Delays (MAY 95)

a. In the event either party should be prevented from performing under this contract by reason of any unforeseeable cause beyond its control and without its fault or negligence, including, but not restricted to, acts of God or of the public enemy, sovereign acts of the United States, acts of a foreign Government, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes and unusually severe weather, performance under the contract shall be suspended in whole or in part until the cause ceases to exist and thereafter the time for fulfillment of the contract shall be extended by the length of time during which the cause prevented performance under the contract.

b. This section shall also apply to an excusable delay condition that prevents delivery at a consignee's plant if-

(1) the delay meets the criteria in paragraph **a.** above; and

(2) the identity of the consignee is known to the Government prior to commencement of the excusable delay condition.

c. The Contractor shall notify the Contracting Officer, in writing, of the nature and extent of the excusable delay condition promptly after the commencement thereof, but in any event prior to outloading of the material from the storage location from which it is to be shipped. The Contractor shall notify the Contracting Officer, in writing, within ten (10) calendar days when the excusable delay condition ceases to exist.

G.10 Setoff of Funds (JUL 98)

The Contractor agrees that the Government may use all or a portion of any monies received by Government to satisfy, in whole or in part, any debt (e.g., delinquent payments, interest or storage charges), arising out of this or any other transaction.

G.11 Indemnification Agreement (JUN 96)

The Contractor shall save and hold harmless and indemnify the Government against any and all liabilities, claims, and costs of whatsoever kind and nature for injury to or death of any person or persons and for loss or damage to any property (Government or otherwise) occurring in connection with or in anyway incident to or arising out of the occupancy, use, service, operations, or performance of work in connection with the contract. Whether due to negligence or not of the Contractor, the Contractor agrees to defend any and all claims or suits against the United States, whether well founded or not, in any way whatsoever alleged to have arisen from or been connected with performance of this contract and to reimburse the United States for any legal expenses (including salaries of attorneys) incurred by the United States in defending such suits.

G.12 Covenant Against Contingent Fees (JAN 95)

a. The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, in its discretion, to add to the contract price or consideration, or otherwise recover, the full amount of the contingent fee.

b. "Bona fide agency," as used in this paragraph, means an established commercial or selling agency, maintained by a Contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

c. "Bona fide employee," as used in this paragraph, means a person, employed by a Contractor and subject to the Contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

d. "Contingent fee," as used in this paragraph, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

e. "Improper influence," as used in this paragraph, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

SECTION H - DEFINITIONS (JUN 95)

As used throughout this Solicitation, the following terms shall have the meaning set forth below:

- a.** The term "Contracting Officer" means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings.
- b.** The term "small business concern" for the purpose of this Solicitation, is a concern, including its affiliates, which is independently owned and operated, is not dominant in the field of operation in which it is offering on Government contracts, and qualified as a small business under the criteria and size standards in 13 CFR Part 121.
- c.** The terms "Offeror", "Purchaser", or "Contractor" may be used interchangeably.

SECTION I - SUBMITTALS

COMPLETE AND RETURN ALL OF THE FOLLOWING WITH YOUR OFFER, UNLESS ANNUAL REPRESENTATIONS, CERTIFICATIONS, AND IDENTIFICATIONS HAVE BEEN SUBMITTED THEN SUBMIT I.1 AND I.2 ONLY:

- I.1 Sale of Government Property Negotiated Sales Contract (JUL 97)**
- I.2 Item Offer Pages - DLA-TANTALUM METAL, CAPACITOR GRADE-001 (MAR 99)**
- I.3 Certificate of Independent Price Determination (JUL 97)**
- I.4 Certification Regarding Debarment, Suspension, Proposed Debarment, Environmental Compliance, and Other Responsibility Matters (JUL 97)**
- I.5 Type of Business Organization (APR 96)**
- I.6 Small Business Concern Certification (JAN 95)**
- I.7 Clean Air and Water Certification (JUN 95)**
- I.8 Authorized Negotiators (JUN 95)**
- I.9 Persons Authorized to Request Shipment of Material (FEB 98)**
- I.10 Offeror's Billing Address (JUL 96)**

I.1 Sale of Government Property Negotiated Sales Contract (JUL 97)

SALE OF GOVERNMENT PROPERTY NEGOTIATED SALES CONTRACT		CONTRACT NUMBER SP0833-01-S-	PAGE 1 of Pages		
<p>This contract is entered into by and between the United States of America, hereinafter called the "Government," represented by the Contracting Officer executing this contract and the Contractor below identified. The Government agrees to sell and the Contractor agrees to buy the material described below in accordance with the terms and conditions of DLA-TANTALUM METAL, CAPACITOR GRADE-001. In the event of a conflict between the terms of the Solicitation and the Negotiated Sales Contract, the terms of the Negotiated Sales Contract shall govern</p>					
ITEM	PROPERTY DESCRIPTION AND LOCATION	QUANTITY (No. of Unit(s))	UNIT	UNIT PRICE	AMOUNT
<p>CONTRACT PERIOD EXPIRES ON:</p>					
EXECUTION BY CONTRACTOR			EXECUTION BY GOVERNMENT		
DATE (Day, Month, Year)			UNITED STATES OF AMERICA BY:		DATE:
NAME OF CONTRACTOR					
ADDRESS (Street, City, State & Zip Code) (Type or Print)			NAME AND TITLE OF CONTRACTING OFFICER		
Telephone Number: _____ Facsimile Number: _____					
SIGNATURE AND TITLE OF PERSON AUTHORIZED TO SIGN THIS CONTRACT (Type or print name and title under signature)			_____ Contracting Officer _____ (Agency)		

Metal Powder - Grades 1, 2, 4, 5, 6 & 7

<u>ITEM NO.</u>	<u>STORAGE LOCATION</u>	<u>FORM/ GRADE</u>	<u>LOT NUMBER</u>	<u>NO. OF BOXES</u>	<u>QUANTITY TANTALUM (Ta) NET WT. (LBS)</u>	<u>QUANTITY TANTALUM (Ta) STOCKPILE WT. (LBS)</u>	<u>UNIT PRICE</u>	<u>TOTAL OFFERED PRICE</u>
		<u>Grade 1</u>						
300	Clearfield, UT	Powder/ NVR Gr. 1	22	4	480.00	479.00	\$ _____	\$ _____
301	Clearfield, UT	Powder/ NVR Gr. 1	23	4	480.00	479.00	\$ _____	\$ _____
302	Clearfield, UT	Powder/ NVR Gr. 1	24	4	480.00	479.00	\$ _____	\$ _____
303	Clearfield, UT	Powder/ NVR Gr. 1	25	4	480.00	479.00	\$ _____	\$ _____
304	Clearfield, UT	Powder/ NVR Gr. 1	26	4	480.00	479.00	\$ _____	\$ _____
305	Clearfield, UT	Powder/ NVR Gr. 1	27	4	480.00	479.00	\$ _____	\$ _____
306	Clearfield, UT	Powder/ NVR Gr. 1	28	4	480.00	479.00	\$ _____	\$ _____
307	Clearfield, UT	Powder/ NVR Gr. 1	29	4	480.00	479.00	\$ _____	\$ _____
308	Clearfield, UT	Powder/ NVR Gr. 1	30	4	480.00	479.00	\$ _____	\$ _____
309	Clearfield, UT	Powder/ NVR Gr. 1	31	4	480.00	479.00	\$ _____	\$ _____
310	Clearfield, UT	Powder/ NVR Gr. 1	32	4	480.00	479.00	\$ _____	\$ _____
311	Clearfield, UT	Powder/ NVR Gr. 1	33	4	480.00	479.00	\$ _____	\$ _____
312	Clearfield, UT	Powder/ NVR Gr. 1	34	4	480.00	479.00	\$ _____	\$ _____
					Sub-total	6,240.00		6,227.00

Metal Powder - Grades 1, 2, 4, 5, 6 & 7

<u>ITEM NO.</u>	<u>STORAGE LOCATION</u>	<u>FORM/ GRADE</u>	<u>LOT NUMBER</u>	<u>NO. OF BOXES</u>	<u>QUANTITY TANTALUM (Ta) NET WT. (LBS)</u>	<u>QUANTITY TANTALUM (Ta) STOCKPILE WT. (LBS)</u>	<u>UNIT PRICE</u>	<u>TOTAL OFFERED PRICE</u>
<u>Grade 2</u>								
313	New Haven, IN	Powder/ Low Cap Gr. 2	1	4	480.00	479.00	\$ _____	\$ _____
314	New Haven, IN	Powder/ Low Cap Gr. 2	2	4	480.00	479.00	\$ _____	\$ _____
315	New Haven, IN	Powder/ Low Cap Gr. 2	3	2	480.00	479.00	\$ _____	\$ _____
316	New Haven, IN	Powder/ Low Cap Gr. 2	4	2	461.00	460.42	\$ _____	\$ _____
Sub-total					1,901.00	1,897.42		
<u>Grade 4</u>								
317	New Haven, IN	Powder/ Very high cap/Gr. 4	3	3	270.00	269.00	\$ _____	\$ _____
318	New Haven, IN	Powder/ Very high cap/Gr. 4	401	4	380.00	379.00	\$ _____	\$ _____
319	New Haven, IN	Powder/ Very high cap/Gr. 4	402	4	440.00	439.00	\$ _____	\$ _____
Sub-total					1,090.00	1,087.00		
<u>Grade 5</u>								
320	New Haven, IN	Powder/ Extra high cap/Gr. 5	502	5	570.00	569.00	\$ _____	\$ _____
321	New Haven, IN	Powder/ Extra high cap/Gr. 5	503	6	650.00	649.00	\$ _____	\$ _____
322	New Haven, IN	Powder/ Extra high cap/Gr. 5	514	6	710.00	709.00	\$ _____	\$ _____
323	New Haven, IN	Powder/ Extra high cap/Gr. 5	515	6	630.00	629.00	\$ _____	\$ _____
Sub-total					2,560.00	2,556.00		

ITEM NO.	STORAGE LOCATION	<u>Ingots (Grade 6)</u>			QUANTITY TANTALUM (Ta)	QUANTITY TANTALUM (Ta)	UNIT PRICE	TOTAL OFFERED PRICE
		FORM/ GRADE	LOT NUMBER	NO. OF BOXES	NET WT. (LBS)	STOCKPILE WT. (LBS)		
		<u>Ingots (Grade 6)</u>						
324	Anniston, AL	Ingots/Gr. 6	19	3	1,240.00	1,239.00	\$ _____	\$ _____
325	Anniston, AL	Ingots/Gr. 6	20	3	1,197.00	1,196.00	\$ _____	\$ _____
326	Clearfield, UT	Ingots/Gr. 6	4	2	756.00	755.00	\$ _____	\$ _____
327	Clearfield, UT	Ingots/Gr. 6	6	2	823.00	822.00	\$ _____	\$ _____
328	Clearfield, UT	Ingots/Gr. 6	7	2	855.00	854.00	\$ _____	\$ _____
329	New Haven, IN	Ingots/Gr. 6	1	2	767.00	766.00	\$ _____	\$ _____
330	New Haven, IN	Ingots/Gr. 6	2	2	738.00	737.00	\$ _____	\$ _____
331	New Haven, IN	Ingots/Gr. 6	3	3	1,184.00	1,183.00	\$ _____	\$ _____
Sub-total					7,560.00	7,552.00		
		<u>Slabs (Grade 7)</u>						
332	Anniston, AL	Slabs/Gr. 7	9	3	1,241.00	1,240.00	\$ _____	\$ _____
333	Anniston, AL	Slabs/Gr. 7	16	3	927.00	926.00	\$ _____	\$ _____
334	Clearfield, UT	Slabs/Gr. 7	8	4	1,320.00	1,319.00	\$ _____	\$ _____
335	New Haven, IN	Slabs/Gr. 7	15	2	503.00	502.00	\$ _____	\$ _____
336	New Haven, IN	Slabs/Gr. 7	1	2	799.00	798.00	\$ _____	\$ _____
337	New Haven, IN	Slabs/Gr. 7	2	2	793.00	792.00	\$ _____	\$ _____
Sub-total					5,583.00	5,577.00		
TOTAL					24,934.00	24,896.42		

L2 Item Offer Pages - Tantalum Metal Capacitor Grade (MAR 99)

DLA-TANTALUM METAL, CAPACITOR GRADE-001

Page 32 of 38

MINIMUM OFFER QUANTITY - ONE ITEM

COMPANY NAME: _____

SIGNATURE: _____

DATE: _____

NAME AND TITLE: _____

TELEPHONE NUMBER: _____

FAX NUMBER: _____

I.3 Certificate of Independent Price Determination (JUL 97)

a. The offeror certifies that:

(1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to (i) those prices, (ii) the intention to submit an offer, or (iii) the methods or factors used to calculate the prices offered;

(2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and

(3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.

b. Each signature on the offer is considered to be a certification by the signatory that the signatory:

(1) Is the person in the offeror's organization responsible for determining the prices being offered in this bid or offer, and that the signatory has not participated and will not participate in any action contrary to subparagraphs **a.**(1) through **a.**(3) above; or

(2)(i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to subparagraphs **a.**(1) through **a.**(3), above

(insert full name of person(s) in the offeror's organization responsible for determining the prices offered in this bid or offer, and the title of his or her position in the offeror's organization);

(ii) As an authorized agent, does certify that the principals named in subdivision **b.**(2)(i) above have not participated, and will not participate, in any action contrary to subparagraphs **a.**(1) through **a.**(3) above; and

(iii) As an agent, has not personally participated, and will not participate, in any action contrary to subparagraphs **a.**(1) through **a.**(3) above.

c. If the offeror deletes or modifies subparagraph **a.**(2) above, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

I.4 Certification Regarding Debarment, Suspension, Proposed Debarment, Environmental Compliance and Other Responsibility Matters (JUL 97)

a. (1) The Offeror certifies, to the best of its knowledge and belief, that -

(i) The Offeror and/or any of its Principals -

(A) Are (____) are not (____) presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(B) Have (____) have not (____), within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property; and

(C) Are (____) are not (____) presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in subdivision **a. (1)(i)(B)** of this provision.

(D) Are ___ are not ___ presently indicted for or otherwise criminally or civilly charged by a Federal, state or local entity with violation of any environmental laws;

(E) Have ___ have not ___ within the three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for violation of a Federal, state or local environmental statute or regulation.

(ii) The Offeror has (____) has not (____), within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.

(2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

(3) If the Offeror answers affirmatively to anything in **a.(1)**, above, the Offeror shall include in its offer an explanation of the circumstances, including the outcome.

This certification concerns a matter within the jurisdiction of an agency of the United States and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under section 1001, title 18, United States Code.

b. The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

c. A certification that any of the items in paragraph **a.** of this provision exists will not necessarily result in withholding of an award under this Solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.

d. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph **a.** of this provision. The knowledge and information of a Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

e. The certification in paragraph a. of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to the other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this Solicitation for default.

I.5 Type of Business Organization (APR 96)

The Offeror represents that--

a. It operates as a corporation incorporated under the laws of the State of _____, an individual, a partnership, a nonprofit organization, or a joint venture.

b. If the offeror is a foreign entity, it operates as an individual, a partnership, a nonprofit organization, a joint venture, or a corporation registered for business in _____(country)

c. If the offeror is a corporation, it is independent (not owned or controlled by another company), owned or controlled by _____corporation company registered for business in _____(state/country).

d. If the offeror is owned or controlled by another, state the relationship (e.g., wholly owned subsidiary, etc.):_____

e. The offeror agrees to provide additional information relating to the above representations if requested to do so by the Contracting Officer.

I.6 Small Business Concern Certification (JAN 95)

The Offeror represents and certifies as part of its offer that it _____ is, _____ is not a small business concern. (See Section H.b., for the definition of a small business concern.)

I.7 Clean Air and Water Certification (JUN 95)

a. The Offeror certifies that it is ___ is not ___ listed on the Environmental Protection Agency (EPA) List of Violating Facilities and that it will not knowingly resell this material to any company that is on the EPA List; and

b. The Offeror will immediately notify the Contracting Officer, before award, of the receipt of any communication from EPA indicating that any facility at which the Offeror plans to use material purchased under this solicitation is under consideration to be listed on the EPA List of Violating Facilities.

I.8 Authorized Negotiators (JUN 95)

The Offeror represents that the following individuals are authorized to negotiate on its behalf.

Name

Title

Telephone

Name

Title

Telephone

I.9 Persons Authorized to Request Shipment of Material (JUL 95)

The Offeror shall provide the name(s), title(s), signature(s), and telephone number(s) of representative(s) authorized to sign Section **J.3 Shipping Instructions**:

Typed Name

Title

Signature

Telephone

Typed Name

Title

Signature

Telephone

Typed Name

Title

Signature

Telephone

I.10 Offeror's Billing Address (JUL 96)

The Offeror shall provide its billing address and billing facsimile number below, if different from the address in Section **I.1 Sale of Government Property Negotiated Sales Contract (JUL 97)**.

SECTION J - LIST OF ATTACHMENTS

- J.1 Analysis and Purchase Specifications**
- J.2 Storage Locations (MAR 99)**
- J.3 Shipping Instructions (JAN 95)**
- J.4 Material Safety Data Sheet**
- J.5 Fedwire Procedures (AUG 97)**

J.1 ANALYSIS AND PURCHASE SPECIFICATION

J.1 Chemical Analysis of Tantalum Metal Capacitor Grade												
ITEM NO.	STORAGE LOCATION	FORM/ GRADE	LOT NUMBER	NO. OF BOXES	PRODUCER	QUANTITY				D.C. Leakage (DCL) microamperes/ microfarad-volt	Capacitance CAP microfarad-volt per gram	Dissipation Factor (DF) maximum per anode
						Tantalum (Ta) Net Wt. (lbs)	Tantalum Ta	Carbon C	Oxygen Q			
		Grade 1										
300	Clearfield, UT	powder/ NVR Gr. 1	22	4		480.00	99.87	0.005	0.08	0.0023	2690	12
301	Clearfield, UT	powder/ NVR Gr. 1	23	4		480.00	99.87	0.006	0.08	0.0025	2720	12
302	Clearfield, UT	powder/ NVR Gr. 1	24	4		480.00	99.86	0.006	0.09	0.0024	2850	11
303	Clearfield, UT	powder/ NVR Gr. 1	25	4		480.00	99.85	0.006	0.01	0.0022	2810	11
304	Clearfield, UT	powder/ NVR Gr. 1	26	4		480.00	99.86	0.006	0.09	0.0018	2740	11
305	Clearfield, UT	powder/ NVR Gr. 1	27	4		480.00	99.86	0.006	0.09	0.0046	2810	10
306	Clearfield, UT	powder/ NVR Gr. 1	28	4		480.00	99.87	0.007	0.08	0.0032	2590	11
307	Clearfield, UT	powder/ NVR Gr. 1	29	4		480.00	99.87	0.007	0.08	0.0044	2770	10
308	Clearfield, UT	powder/ NVR Gr. 1	30	4		480.00	99.87	0.008	0.08	0.003	2570	11
309	Clearfield, UT	powder/ NVR Gr. 1	31	4		480.00	99.86	0.006	0.09	0.003	2530	11
310	Clearfield, UT	powder/ NVR Gr. 1	32	4		480.00	99.86	0.006	0.09	0.0021	2450	11
311	Clearfield, UT	powder/ NVR Gr. 1	33	4		480.00	99.87	0.006	0.09	0.0018	2590	12
312	Clearfield, UT	powder/ NVR Gr. 1	34	4		480.00	99.86	0.006	0.09	0.0032	2400	12
					Sub-total	6,240.00						

<i>J.1 Chemical Analysis of Tantalum Metal Capacitor Grade</i>												
ITEM NO.	STORAGE LOCATION	FORM/ GRADE	LOT NUMBER	NO. OF BOXES	PRODUCER	QUANTITY				D.C. Leakage (DCL) microamperes / microfarad-volt	Capacitance CAP microfarad-volt per gram	Dissipation Factor (DF) maximum per anode
						Tantalum (Ta) Net Wt. (lbs)	Tantalum Ta	Carbon C	Oxygen O			
		<u>Grade 2</u>										
313	New Haven, IN	powder/ Low Cap Gr. 2	1	4		480.00	99.86	0.006	0.01	0.0026	2880	10
314	New Haven, IN	powder/ Low Cap Gr. 2	2	4		480.00	99.89	0.006	0.07	0.0019	2560	8
315	New Haven, IN	powder/ Low Cap Gr. 2	3	2		480.00	99.87	0.006	0.09	0.0022	2360	8
316	New Haven, IN	powder/ Low Cap Gr. 2	4	2		461.00	99.87	0.006	0.08	0.0031	1250	4
					Sub-total	1,901.00						
		<u>Grade 4</u>										
317	New Haven, IN	powder/ Very High Cap/Gr. 4	3	3		270.00	99.89			0.0003	2880	13
318	New Haven, IN	powder/ Very High Cap/Gr. 4	401	4		380.00	99.88			0.0021	3030	16
319	New Haven, IN	powder/ Very High Cap/Gr. 4	402	4		440.00	99.89			0.0026	3133	15
					Sub-total	1,090.00						
		<u>Grade 5</u>										
320	New Haven, IN	powder/ Extra High Cap/Gr. 5	502	5		570.00	99.86			0.0018	3775	16
321	New Haven, IN	powder/ Extra High Cap/Gr. 5	503	6		650.00	99.85			0.0014	3785	16
322	New Haven, IN	powder/ Extra High Cap/Gr. 5	514	6		710.00	99.85			0.0046	3661	17
323	New Haven, IN	powder/ Extra High Cap/Gr. 5	515	6		630.00	99.86			0.0048	3570	14
					Sub-total	2,560.00						

J.1 Chemical Analysis of Tantalum Metal Capacitor Grade									
ITEM NO.	STORAGE LOCATION	FORM/ GRADE	LOT NUMBER	NO. OF BOXES	PRODUCER	QUANTITY			
						Tantalum (Ta) Net Wt. (lbs)	Tantalum Ta	Carbon C	Oxygen O
		Ingots (Grade 6)							
324	Anniston, AL	Ingots/Gr. 6	19	3		1,240.00	99.93	0.006	0.017
325	Anniston, AL	Ingots/Gr. 6	20	3		1,197.00	99.92	0.007	0.018
326	Clearfield, UT	Ingots/Gr. 6	4	2		756.00	99.93	0.006	0.017
327	Clearfield, UT	Ingots/Gr. 6	6	2		823.00	99.93	0.006	0.016
328	Clearfield, UT	Ingots/Gr. 6	7	2		855.00	99.92	0.006	0.018
329	New Haven, IN	Ingots/Gr. 6	1	2		767.00	99.94	0.006	0.015
330	New Haven, IN	Ingots/Gr. 6	2	2		738.00	99.93	0.006	0.018
331	New Haven, IN	Ingots/Gr. 6	3	3		1,184.00	99.92	0.007	0.016
					Sub-total	7,560.00			
		Slab (Grade 7)							
332	Anniston, AL	Slabs/Gr. 7	9	3		1,241.00	99.98	*	*
333	Anniston, AL	Slabs/Gr. 7	16	3		927.00	99.98		
334	Clearfield, UT	Slabs/Gr. 7	8	4		1,320.00	99.98		
335	New Haven, IN	Slabs/Gr. 7	15	2		503.00	99.97		
336	New Haven, IN	Slabs/Gr. 7	1	2		799.00	99.97		
337	New Haven, IN	Slabs/Gr. 7	2	2		793.00	99.97		
					Sub-total	5,583.00			

* Carbon and oxygen content are not available for Slab (Grade 7).

EXECUTIVE OFFICE OF THE PRESIDENT
Office of Emergency Planning

Prepared and Issued by the Industrial Materials Staff
Business and Defense Services Administration
Department of Commerce

P-101-R4
November 20, 1967
(Supersedes issue of
June 2, 1967)

NATIONAL STOCKPILE
PURCHASE SPECIFICATION

TANTALUM METAL – CAPACITOR GRADE

I. DESCRIPTION

This Specification covers capacitor grade tantalum metal in the forms of powder, ingot and slab suitable for use in the production of electronic devices.

NOTE: This revision of the Purchase Specification for Tantalum Metal – Capacitor Grade, provides for higher oxygen content in Grades 1A and 4 powders, reduction in bulk density of Grade 2A, an increase in maximum particle size of Grade 5 powder, a range of sintering time for Grade 5 powder, conversion from optical to true temperature readings, change in the packaging barrier material and defines the term wild deviation.

II. CHEMICAL, PHYSICAL, AND ELECTRICAL PROPERTIES REQUIREMENTS

Each manufacturer's lot of tantalum powder purchased under this Specification shall weigh not less than 200 or more than 700 pounds and shall be any of the following grades: 1. High capacitance for normal voltage ratings; 2. Low capacitance; 3. High capacitance, high voltage, premium type powder; 4. Very high capacitance for low voltage ratings where size and powder economy are required; and 5. Extra high capacitance for low voltage rating. Each manufacturer's lot of tantalum ingots or slabs purchased under this Specification shall weigh not less than 500 or more than 1,500 pounds.

Each lot purchased under this Specification shall comply with the applicable requirements for the chemical, physical, functional and electrical properties specified herein.

A. CHEMICAL REQUIREMENTS

Elements Are Expressed In Parts Per Million (ppm) Except Tantalum *

GRADES									
			POWDER					INGOT	SLAB
			1A	2A	3	4	5	6A	7
Tantalum*	Ta	Min.	99.83	99.83	99.80	99.83	99.80	99.9	99.90
Columbium	Cb	Max.	100	100	50	100	100	50	50
Carbon	C	Max.	80	80	50	80	100	50	50
Nitrogen	N	Max.	100	100	50	100	100	50	50
Oxygen	O	Max.	1800	1300	1300	1800	1800	200	200
Oxygen	O	Min.	600	600	800	600	800	--	--
Hydrogen	H	Max.	100	100	50	100	100	30	30
Iron	Fe	Max.	50	50	20	50	50	50	50
Silicon	Si	Max.	100	100	20	100	100	50	20
Zirconium	Zr	Max.	20	20	10	20	20	20	20
Titanium	Ti	Max.	30	30	20	30	30	20	20
Tungsten	W	Max.	50	50	50	50	50	50	50
Molybdenum	Mo	Max.	20	20	10	20	20	20	20
Magnesium	Mg	Max.	50	50	20	50	50	20	20
Manganese	Mn	Max.	20	20	10	20	20	10	10
Calcium	Ca	Max.	20	20	10	20	20	10	10
Nickel	Ni	Max.	100	100	10	100	100	10	10
Tin	Sn	Max.	20	20	10	20	20	10	10
Aluminum	Al	Max.	20	20	10	20	20	20	20
Copper	Cu	Max.	20	20	10	10	10	10	10
Lead	Pb	Max.	20	20	10	10	10	10	10
Chromium	Cr	Max.	30	30	10	30	30	10	10
Cobalt	Co	Max.	20	20	10	20	20	10	10
Sodium	Na	Max.	150	150	20	150	150	20	20

* Percent by weight, "as received" basis

B. Physical Requirements:

1. Powder:

All tantalum powder shall pass a U.S. Standard (ASTM Designation E-11), Sieve No. 60. The particle size, shape and distribution shall be such that the powder will conform to the tests for the electrical requirements specified.

2. Ingots:

Tantalum ingots shall be of the original size and shape normal with the producer, but shall weigh not less than 50 or more than 250 pounds each and have a maximum diameter of 5-inches and a minimum length of 12-inches. All ingots shall be solid and sound, and those in any lot shall be of the same nominal size and shape. Ingots, as cast, shall have the top and bottom ends cropped to remove any shrinkage cavity or incompletely melted metal. The entire surface of the sides of each ingot shall be machined smooth and clean; and shall be free from pits, cracks, foreign materials, or cold shuts.

3. Slabs:

Tantalum slabs shall range in size between 1" x 5" x 13", and 2" x 10" x 26", nominal dimensions. All slabs shall be solid and sound, and those in any lot shall be of the same nominal size and shape. The entire surface of the sides of each slab shall be machined smooth and clean; and all surfaces shall be free from pits, cracks, foreign materials, or cold shuts. The slabs shall be free of defects as determined by die penetration testing and shall be sound in accordance with the ultrasonic method of testing set forth in Aerospace Material Specifications 2630, of the Society of Automotive Engineers, Inc. Reference blocks for test shall be of Tantalum.

C. Electrical Properties:

1. General:

The tantalum powder when tested in accordance with the following procedures shall comply with the applicable requirements for electrical properties specified in the table below. All acid used in the forming solution and in the test solution shall be reagent grade 85% phosphoric acid. The water used in the forming solution, in the test solution, and for washing and anodized pellets shall be either distilled or deionized having a minimum resistivity of one (1) megohm per millimeter.

2. Pelletizing:

The samples of tantalum powder shall be mixed with a binder and die lubricant, in the amount of 2 to 3% by weight, consisting of "Carbowax 6000" or stearic acid. This mixture shall be pressed into pellets having a diameter of 0.25 inch \pm .01 inch and complying with the applicable requirements for the pressed (green) density and the pellet weight specified in the table below. The pellets shall be provided with tantalum lead wires 0.025 inch in diameter having a uniform total length with an external length of approximately $\frac{3}{4}$ -inch. The quantity of pellets pressed and sintered shall be that which can be obtained from $\frac{1}{2}$ to 1 pound of the sample. The pellets shall be de-waxed under vacuum in a separate furnace before sintering.

3. Sintering:

The pellets shall be sintered for the applicable period and within the range of temperatures specified in Table on page 6A.

The temperatures for sintering shall be true temperatures and not optical readings. However, the temperature at which the sintering is conducted may be determined by an optical pyrometer, the readings of which shall be corrected to give the true temperatures. The amount of such correction is to be determined periodically by either one or both of the following methods:

- (1) Simultaneously measuring, with a calibrated thermocouple and the optical pyrometer being used, the temperature of the load of the pellets being sintered in the furnace employed, with the difference in readings being the correction.
- (2) Sintering pellets made of standard powder with a known rating, as a control device, with pellets of the powder being tested in the furnace employed, with the correction being correlated to the difference in capacitances obtained.

4. Anodizing:

The sintering pellets shall be formed (anodized) in agitated 0.01% (by volume) phosphoric acid solution maintained at $90^{\circ}\text{C} \pm 2^{\circ}$. A low ripple DC power source shall be used to supply a formation current controlled at 40 ± 2 milliamperes per gram of anode for all powders except Grade 2A, for which a current of 25 ± 2 milliamperes per gram of anode shall be used, until a formation of voltage of 200 volts is reached.

For grades 1A, 2A, and 3 powder the voltage is held constant at 200 volts until the formation current has dropped to approximately 12 milliamperes per

gram. The anodizing is then continued until 270 volts is reached, using 12 milliamperes per gram current density. The voltage shall then be held at 270 ± 1 volt for one hour, after which time the voltage shall be discharged by shorting the anode and cathode leads through a 1000-ohm resistor.

For grades 4 and 5 the formation shall be carried to 200 volts at 40 ± 2 milliamperes per gram of anode, and the voltage held at 200 ± 1 volt for two hours, after which time the voltage will be discharged by shorting the anode and cathode leads through a 1000-ohm resistor.

The anodized pellets shall be thoroughly washed in distilled or deionized water as defined above, at room temperature for 30 minutes and then be over-dried at 85°C for 30 minutes.

5. Testing:

Leakage, capacitance, and dissipation factor of the anodes shall be measured in a test cell having a platinized silver cathode with an inside surface of not less than 8 square inches. The DC leakage for grades 1A, 2A, and 3 shall be measured in 0.01% (by volume) phosphoric acid; grades 4 and 5 shall be measured in 10% (by volume) phosphoric acid, both solutions maintained at $25^{\circ} \pm 2^{\circ}\text{C}$.

The leakage of the anodes shall be measured across the anode by applying the applicable voltage specified in the table below; the current shall be read after a two-minute charge.

Before each set of anodes is measured for leakage, and without anodes in the test cell, a blank leakage current of the circuit shall be read to determine that there is no significant extraneous contribution to the measurement due to the circuit.

The direct current (DC) leakage shall be measured on a RCA Microammeter, Model WV-84B or equivalent. Well-regulated direct current or battery power shall be used for testing leakage of the anodes.

For grades 1A, 2A, and 3 the anodes shall be thoroughly and carefully washed after leakage measurements in distilled or deionized water at room temperature for 5 minutes and then oven-dried at 105°C for 60 minutes.

For all grades, the capacitance and dissipation factor measures shall be made in 10% (by volume) phosphoric acid (H_3PO_4).

Capacitance and dissipation factors shall be measured (after discharging residual voltage from the leakage test, and after the anodized pellets are placed in testing electrolyte for at least 15 minutes) at 120 cycles per second with an AC signal of 0.15 volts rms maximum (measured across the test cell when the anode is in place) with no DC bias. The capacitance and dissipation factors shall be read on a Sprague Electric or General Radio Capacitance Bridge or equivalent. Care shall be taken that all circuit connections have low resistance, so as to avoid significant external contribution to the measured dissipation factor. The capacitance and dissipation factor values specified in the table below are the values read for the whole test cell plus anode assembly. Normally, anodes shall be tested within 24 hours after sintering.

The sample of tantalum powder will be converted into anodes from which ten (10) anodes shall be selected and wet-tested for electrical properties. In the event of failure, a re-test of ten (10) additional anodes shall be made. In the event of failure of this second test, an additional sample quantity of tantalum powder shall be processed as before. Failure of this third test shall be cause for rejection of the lot and subject the lot to testing by an umpire mutually agreed upon.

The average results of any set of ten anodes tested shall comply with the electrical requirements in the table on page 6A. Wild deviations may be allowed to the extent permitted in the table and shall not be included in the average value reported. For the DC leakage value, the wild deviation is defined as any value which exceeds the average determined for the lot by more than three times.

6. Requirements and Properties:

Physical or Functional Requirements	Units of Measure	GRADE OF POWDER									
		1A		2A		3		4		5	
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
Bulk Density (Scott)	Grams/ Cu. Inch	60	85	70	100	80	100	55	85	50	75
Fisher Particle Size	Microns	6..5	10	15	25	7	12	5.5	8	3	9
Pressed (Green) Density	Grams/ Cu. Cm.	8	9	8.5	10.5	9	10	6.5	8.5	6.0	8
Pellet Weight (Without Lead Wires)	Grams (Approx.)	4		4		4		2		2	
Sintering Time (Total)	Minutes	60		60		60		30		20	30
True Sintering Temperature Range	Degrees C	2100	2200	2100	2150	2100	2200	2000	2100	1900	2000
Formation Voltage Leakage Test	Volts Volts \pm 1	270 240		270 240		270 240		200 140		200 140	
Electrical Properties											
Capacitance	Microfarad- volts/gram	1800	2800	1000	1400	1200	2000	2600	4000	3500	4500
DC Leakage	Microamperes /microfarad- volt	.0015		.0015		.0012		.0004		.0005	
Dissipation Factor	Max. % per anode	25		15		20		20		25	
Wild Deviations	# Allowed	One		One		None		One		One	

7. Scintillation Test:

In addition to the foregoing, a scintillation (breakdown) test shall also be performed on a minimum of five (5) pellets which have been made and sintered as specified above, in the size applicable to the grade being tested, as provided in the table below. The sintered pellets shall be formed (anodized) in a agitated solution of 1% by weight, phosphoric acid at 90° C. The circuit shall be wired so that the scintillation voltage on each individual anode can be recorded and the anode disconnected from the circuit after it scintillates. A 450-volt high current DC voltage supply shall be used and an appropriate resistor (i.e., 3000 ohms for 4 grams and 6000 ohms for 2 grams), shall be placed in series with the anodes to protect them against damaging high currents during the first part of the anodization. The test rig shall be assembled, the circuit closed and the full 450 volts imposed across the appropriate resistor and the test anodes in series.

The voltage at which the first anode scintillates shall be recorded and the anode removed from the circuit. The test shall be continued until all anodes have scintillated, removing each anode as it scintillates. The voltage at which each one so scintillates shall be recorded. The average thereof and the lowest individual value shall comply with the applicable requirement of the following:

Grade	Use	Values	
		Min. Avg.	Min. Indiv.
1A	High capacitance for normal voltage ratings	210	200
2A	Low capacitance	210	200
3	High capacitance, premium type, for high voltage ratings	280	260
4	Very high capacitance for low voltage ratings	200	190
5	Extra high capacitance for low voltage ratings	165	150

III. PACKAGING, MARKING, IDENTIFICATION, AND SHIPPING

A. Packaging:

1. Ingots and Slabs:

Each tantalum ingot or slab shall be placed in polyethylene bag not less than 0.004-inch in thickness which shall be heat sealed.

Each lot of tantalum ingots or slabs shall be packed in one or more new wooden boxes which shall be equal to the requirements for Style B, Type III, Federal Specification PPP-B-610a: Boxes, Wood, Cleated-Plywood, except the plywood shall be not less than ½-inch thick, and 2" x 4" material shall be used for the skids which shall be fastened not less than 1 inch or more than 2 inches from the ends of the box. The boxes should

not exceed approximately 500 pounds gross weight and only ingots or slabs from the same lot shall be placed in a box. Cushioning or internal bracing shall be used, if necessary, to prevent shifting of the ingots or slabs in a box. Each box shall be strapped with five steel bands, three crosswise, two lengthwise. The bands shall be not less than ¾-inch wide and 0.020-inch thick. All boxes of ingots or slabs under the same contract shall be of the same nominal size and shape.

2. Powder:

Tantalum powder shall be packed in new 1-quart, wide mouth, screw cap bottles, each with smooth lip surface, made from linear (high density) polyethylene, blow molded and free from defects, conforming to the following requirements:

Suitable for use up to	250° F
Specific Gravity – minimum	0.96
Porosity when immersed in water for 24 hours at 70° F – Maximum	0.01%
Brittleness temperature	-180° F
Standard weight without cover with 5 grams tolerance	85 grams
Diameter – inches	3-½ to 4
Height – inches	7-½ to 8
Sidewall thickness – average	0.07-inch
Sidewall thickness – minimum at any 1 point	0.06-inch
Bottom thickness – average	0.06-inch
Bottom thickness – minimum at any 1 point	0.05-inch
Minimum thickness at seam of sidewall and Bottom. This thickness to be confined To a distance of ¼-inch on each side of the seam.	0.035-inch

The screw cap shall be made of polypropylene and contain a gasket insert of a similar but softer plastic material so as to form a tight closure.

A measured quantity of 10 pounds of tantalum metal powder shall be carefully inserted in each polyethylene bottle and, while the bottle is being filled, the powder shall be treated with argon gas for the purpose of minimizing oxidation during long-term storage. After filling the bottle with 10 pounds of tantalum powder, the threads of the bottle shall be coated with a suitable epoxy resin prior to placement of the screw cap. The cap shall be tightened as much as possible without rupture.

After capping the bottle, the junction between the cap and the bottle shall be properly cleaned with a suitable solvent to remove dirt, oil, etc., after

which it shall be taped with a ½-inch wide Teflon tape (polytetrafluorethylene skived tape with silicon polymer adhesive on one side).

Twelve bottle (three rows of four) containing a total of 120 pounds of tantalum metal powder shall be packed in a new wooden box lined with a gas barrier laminated film. The film shall be so shaped and formed as to cover and enclose the 12 bottles in such a way that heat sealing will prevent outside air and moisture from coming in contact with the bottles. The seal strength after sealing of laminated film edges shall be a minimum of 12 pounds per linear inch. No evidence of delamination in the basic material or upon heat sealing shall be shown by the laminated film. The laminated barrier material shall comply with the requirements of Military Specification Mil-B-131D, Class 1 – General Use. An aluminum foil 0.00035 inches thick with polyethylene films .0033 inches and .001 inches thick laminated on each side, respectively, with a backing of scrim (cheese cloth) and meeting the requirements of this Military Specification has been used for this purpose. This example is not meant to be restrictive or to exclude other materials that would comply with the requirements of the specification.

Twelve bottles shall be packed in new wooden boxes equal to the requirements for Style B, Type III, Class 1, Federal Specification PPP-B-601a: Boxes, Wood, Cleated-Plywood.

Cushioning or internal bracing shall be used, if necessary, to prevent shifting of the polyethylene bottles in the box. Each box shall be strapped with four steel bands, two crosswise and two lengthwise. The bands shall not be less than ¾-inch wide and 0.020-inch thick. All boxes under the same contract shall be of the same nominal size and shape.

B. Marking:

All markings shall be in English.

1. Powder:

Each box containing bottles of tantalum powder shall be permanently and legibly marked by firmly attaching an aluminum tag to the outside of one end of the box. The tag shall be not less than 3-inches wide by 5-inches long and about 0.014-inch thick on which shall be stamped or die-marked in capital letters of equal height the following:

Name of Product, Form and Grade
Name of Producer
Country of Origin

Month and Year Produced
Fisher Particle Size
Number of Bottles
Gross and Net Weights
Government Contract Number
Manufacturer's Lot Number
Box Serial Number (e.g., 1 of 20, 2 of 20, etc.)

Each aluminum tag shall also be permanently marked to show the DC leakage current, capacitance, and dissipation factor of the tantalum powder in the box.

A duplicate aluminum tag shall be firmly attached to the inside of the end of the box that does not bear the outside aluminum tag.

The marking shall not include a security classification or anything indicating National Stockpile ownership other than the contract number.

2. Ingots and Slabs:

Each ingot or slab shall have the manufacturer's identification, lot number, and ingot or slab serial number stamped on one end.

One side of each box of ingots or slabs shall be permanently and legibly marked with capital letters. The letters shall be not less than $\frac{3}{4}$ -inch and of equal height. The marking shall include the following:

Name of Product, Form and Grade
Name of Producer
Country of Origin
Month and Year Produced
Number of Ingots or Slabs
Gross and Net Weights
Government Contract Number
Manufacturer's Lot Number
Box Serial Number (e.g., 1 of 20, 2 of 20, etc.)

The top of each box will be stenciled "This Side Up" in the same size and type letters as required on the side of the box.

The marking shall not include a security classification or anything indicating National Stockpile ownership other than the contract number.

A waterproof envelope containing a document in permanent ink showing the ingots or slabs in the box shall be placed in each box. A duplicate

waterproof envelope and document shall be fastened to the end of each box.

C. Identification:

Appropriate identifying documents shall accompany each shipment which shall include a cross-reference between the manufacturer's lot number and the serial number of the ingots, slabs, or boxes of powder in each lot.

D. Shipping:

Boxes of tantalum ingots, slabs, or powder shall be loaded, braced, and blocked in the carrier's conveyance in compliance with applicable rules and regulations set forth in the carrier's classifications and other tariffs. For rail shipments, the applicable rules and regulations published by the Association of American Railroads (AAR) in such Pamphlets Nos. 14 and 18 and Circular No. 42-B (Latest Revision) shall be followed.

IV. SAMPLING, INSPECTION, AND TESTING

Each manufacturer's lot of tantalum ingots, slabs, or powder shall be subject to sampling, inspection, and testing by the purchaser or his designee.

The producer shall perform chemical analysis, physical tests, and electrical tests on powder, ingots, and slabs to determine compliance with the requirements of this specification and shall furnish copies of certificates showing the results thereof in the number designated by the purchaser.

The chemical analysis shall be performed by the following methods on undried samples of the material to determine the content of each of the elements listed in Section II, A – Chemical Requirements:

Oxygen – Vacuum fusion or inert gas fusion using Leco Conductometric or Thermoconductivity equipment;

Carbon – Combustion in oxygen stream with an accelerator using conductometric equipment;

Nitrogen – Micro-Kjeldahl procedure with determination being made colorimetrically or spectrophotometrically with Nessler's reagent;

Hydrogen – Vacuum fusion or hot extraction;

Sodium – Flame photometry, emission spectroscopy, or atomic absorption spectrophotometry;

Tungsten – Photometric or other equivalent method;

Tantalum – Assumed to be the arithmetic difference between 100% and the sum of the percentages of all elements determined including the gases; and,

Other Elements – Emission spectroscopy or – for those elements for which at least as accurate results can be obtained – atomic absorption spectrophotometry or colorimetry.

So that the tantalum content can be accurately obtained by the method of difference, more than a compliance or non-compliance of the other elements with the requirements of Section II, A, must be determined. The apparatus and methods employed shall be such that the actual numerical content of the elements listed will be determined. A sufficient number of standards shall be used so that the concentration of each element can be determined in contents that range from not more than $\frac{1}{2}$ of the lowest maximum to the highest maximum applicable to the element for all grades of powder. If the amount determined of any element exceeds the highest allowable limit for any grade of powder, that element may be reported as more than – (approximate maximum). When contents are found that are less than $\frac{1}{2}$ of the lowest maximums, such contents shall be reported and be used in calculating the tantalum content.

The spectrograph employed shall have sufficient resolving power and linear dispersion to produce a clear separation of the lines used. The emission spectra of the standards and the samples shall be recorded on the same photographic plate.

The spectrographic determinations may be made by either directly on the sample or on a concentration of the impurity elements of the sample, after approximately 95% of the Tantalum has been separated by solvent extraction processes. Any element, such as silicon, that may not be retained in the impurities shall be determined in the original sample by other methods, such as emission spectroscopy.

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J.2 STORAGE LOCATIONS (MAR 99)

<u>Site</u>	<u>Days</u>	<u>Hours</u>	<u>Transportation Available</u>
Clearfield, UT	M - F	7:30 AM - 4:00 PM	Truck
New Haven, IN	M - F	7:30 AM - 4:00 PM	Truck
*Anniston, AL	M - F	9:00 AM - 2:00 PM	Truck

* Unstaffed

Operations and Logistics Division Point of Contact:

Melvin Lee
Defense Logistics Agency
Defense National Stockpile Center
ATTN: DNSC-MO
8725 John J. Kingman Road, Suite 4616
Fort Belvoir, VA 22060-6223
Telephone 703-767-7614
Facsimile 703-767-7613

Shipping Request Number: _____

J.3 SHIPPING INSTRUCTIONS

1. a. Contractor: _____

b. Point of Contact: _____ c. Telephone No.: _____

2. a. DNSC Contract No.: SP0833-01-S- _____ b. Commodity: Tantalum Metal _____

3. Item/Pile: _____

4. Depot: _____

5. a. Quantity: _____

b. Unit Price: _____ c. Total Dollar Value: _____

6. Shipping Method: _____

7. a. Carrier Name: _____

b. Point of Contact: _____ c. Telephone No.: _____

8. Date Shipment Desired: _____

9. Ship To: _____

10. Minimum Load: _____

11. a. Outloader: _____ b. Telephone No.: _____

12. a. Sampler: _____ b. Telephone No.: _____

13. Copy of Payment Attached: Yes No

14. Remarks: _____

15. Contractor's Signature: _____

Date Telephone

16. Shipment Approved and Authorized: _____

Contracting Officer Date

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SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

DEFENSE LOGISTICS AGENCY
DEFENSE NATIONAL STOCKPILE CENTER
8725 JOHN J. KINGMAN ROAD
SUITE 3339
FORT BELVOIR, VA 22060-6223

EMERGENCY TELEPHONE NUMBER:
1-800-424-9300 (NORTH AMERICA)
1-703-527-3887 (INTERNATIONAL)

SUBSTANCE: TANTALUM

TRADE NAMES/SYNONYMS:
TANTALUM-181; TANTALUM POWDER; TA; DLA22420; RTECS WW5505000

CHEMICAL FAMILY: metal

CREATION DATE: Jul 01 1992
REVISION DATE: Mar 12 1998

SECTION 2 COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENT: TANTALUM
CAS NUMBER: 7440-25-7
EC NUMBER (EINECS): 231-135-5
PERCENTAGE: 100

SECTION 3 HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4): HEALTH=1 FIRE=3 REACTIVITY=0

EC CLASSIFICATION (CALCULATED):
F Highly Flammable

R 17

EMERGENCY OVERVIEW:

PHYSICAL DESCRIPTION: Odorless, gray to bluish, hard, malleable, ductile metal or black powder. When polished the metal may be silver white.
MAJOR HEALTH HAZARDS: No significant target effects reported.
PHYSICAL HAZARDS: Extremely flammable. May ignite spontaneously on exposure to air. Dust/air mixtures may ignite or explode.

POTENTIAL HEALTH EFFECTS:

INHALATION:

SHORT TERM EXPOSURE: no information on significant adverse effects
LONG TERM EXPOSURE: lung damage

SKIN CONTACT:

SHORT TERM EXPOSURE: irritation
LONG TERM EXPOSURE: no information is available

EYE CONTACT:

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SHORT TERM EXPOSURE: mild irritation

LONG TERM EXPOSURE: no information on significant adverse effects

INGESTION:

SHORT TERM EXPOSURE: no information on significant adverse effects

LONG TERM EXPOSURE: no information on significant adverse effects

CARCINOGEN STATUS:

OSHA: N

NTP: N

IARC: N

SECTION 4 FIRST AID MEASURES

INHALATION: Remove from exposure immediately. Use a bag valve mask or similar device to perform artificial respiration (rescue breathing) if needed. Get medical attention.

SKIN CONTACT: It is unlikely that emergency treatment will be required. If adverse effects occur, wash with soap or mild detergent and large amounts of water. Get medical attention, if needed.

EYE CONTACT: Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains. Get medical attention immediately.

INGESTION: If vomiting occurs, keep head lower than hips to help prevent aspiration. Get medical attention, if needed.

SECTION 5 FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARDS: Negligible fire and explosion hazard in bulk form. Dust/air mixtures may ignite or explode. Finely divided material may ignite spontaneously. May ignite on exposure to air.

EXTINGUISHING MEDIA: dolomite, dry powder for metal fires, sand, graphite, soda ash, sodium chloride

Do not get water directly on material.

FIRE FIGHTING: Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. For fires in cargo or storage area: Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. If this is impossible then take the following precautions: Keep unnecessary people away, isolate hazard area and deny entry. Let the fire burn. Use extinguishing agents appropriate for surrounding fire. Avoid inhalation of material or combustion by-products.

LOWER FLAMMABLE LIMIT: <0.2 g/L

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SECTION 6 ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL RELEASE:

Avoid heat, flames, sparks and other sources of ignition. Do not touch spilled material. Small spills: Collect spilled material in appropriate container for disposal. Move containers away from spill to a safe area. Large spills: Wet down area with water. Dike for later disposal. Remove sources of ignition. Keep unnecessary people away, isolate hazard area and deny entry. Clean up residue with a high-efficiency particulate filter vacuum.

SECTION 7 HANDLING AND STORAGE

Store and handle in accordance with all current regulations and standards. Keep separated from incompatible substances. Keep material wetted. Store in compatible containers. Store in a cool, dry place.

SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS:

TANTALUM:

TANTALUM METAL AND OXIDE DUSTS (as Ta):

- 5 mg/m3 OSHA TWA
- 5 mg/m3 ACGIH TWA
- 5 mg/m3 NIOSH recommended TWA 10 hour(s)
- 10 mg/m3 NIOSH recommended STEL
- 5 mg/m3 DFG MAK 4 times/shift (total dust)
- 5 mg/m3 UK OES TWA
- 10 mg/m3 UK OES STEL

MEASUREMENT METHOD: Particulate filter; Gravimetric; NIOSH III # 0500, Nuisance Dust (total)

VENTILATION: Provide local exhaust ventilation system. Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Ensure compliance with applicable exposure limits.

EYE PROTECTION: Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

CLOTHING: Protective clothing is not required.

GLOVES: Protective gloves are not required, but recommended.

RESPIRATOR: The following respirators and maximum use concentrations are drawn from NIOSH and/or OSHA.

Measurement Element:

Tantalum (Ta) 25 mg/m3

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Any dust and mist respirator.
 50 mg/m³
 Any dust and mist respirator.
 Any dust, mist, and fume respirator.
 Any supplied-air respirator.
 125 mg/m³
 Any supplied-air respirator.
 Any powered, air-purifying respirator with a dust and mist filter.
 250 mg/m³
 Any air-purifying respirator with a full facepiece and a high-efficiency particulate filter.
 Any supplied-air respirator with a full facepiece.
 Any powered, air-purifying respirator with a full facepiece and a high-efficiency particulate filter.
 Any self-contained breathing apparatus with a full facepiece.
 Any supplied-air respirator with a full facepiece.
 2500 mg/m³
 Any supplied-air respirator operated in a pressure-demand or other positive-pressure mode.
 Escape -
 Any air-purifying respirator with a full facepiece and a high-efficiency particulate filter.
 Any appropriate escape-type, self-contained breathing apparatus.
 For Unknown Concentrations or Immediately Dangerous to Life or Health -
 Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply.
 Any self-contained breathing apparatus with a full facepiece.

 SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION: Odorless, gray to bluish, hard, malleable, ductile metal or black powder. When polished the metal may be silver white.

MOLECULAR WEIGHT: 180.9

MOLECULAR FORMULA: TA

BOILING POINT: 9797 F (5425 C) approximate

MELTING POINT: 5425 F (2996 C)

VAPOR PRESSURE: 0.0 mmHg @ 20 C

VAPOR DENSITY: Not applicable

SPECIFIC GRAVITY (water=1): 16.69

WATER SOLUBILITY: insoluble

PH: Not applicable

VOLATILITY: Not applicable

ODOR THRESHOLD: Not available

EVAPORATION RATE: Not applicable

COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available

SOLVENT SOLUBILITY:

Soluble: hydrofluoric acid, fused alkali, fuming sulfuric acid, nitric acid/hydrofluoric acid mixtures

Insoluble: acids, alkali

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SECTION 10 STABILITY AND REACTIVITY

REACTIVITY: Finely divided material may ignite spontaneously.

CONDITIONS TO AVOID: Avoid heat, flames, sparks and other sources of ignition.

INCOMPATIBILITIES: halogens, oxidizing materials, acids

TANTALUM:

BROMINE TRIFLUORIDE: Incandescent reaction.

FLUORINE: Ignites on contact.

LEAD CHROMATE: May react explosively.

MINERAL ACIDS: Incompatible.

OXIDIZERS (STRONG): Fire and explosion hazard.

SULFUR TRIOXIDE: Incompatible.

HAZARDOUS DECOMPOSITION:

Thermal decomposition products: miscellaneous decomposition products

POLYMERIZATION: Will not polymerize.

SECTION 11 TOXICOLOGICAL INFORMATION

TANTALUM:

TUMORIGENIC DATA:

3760 mg/kg implant-rat TDLo

HEALTH EFFECTS:

INHALATION:

ACUTE EXPOSURE:

TANTALUM: Insufflation of the metal powder in humans was without adverse effects.

CHRONIC EXPOSURE:

TANTALUM: Repeated or prolonged exposure to tantalum alloys may have caused a mild fibrosis and chronic rhinitis in exposed workers and may play a role in producing "hard metal pneumoconiosis" in workers exposed to tantalum as well as other metals.

SKIN CONTACT:

ACUTE EXPOSURE:

TANTALUM: May cause irritation.

CHRONIC EXPOSURE:

TANTALUM: No data available.

EYE CONTACT:

ACUTE EXPOSURE:

TANTALUM: Dusts may cause slight irritation.

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CHRONIC EXPOSURE:

TANTALUM: Implantation of the metal into rabbit eyes for longer than a year has been reported to cause no significant adverse effects.

INGESTION:

ACUTE EXPOSURE:

TANTALUM: Large oral doses of tantalum compounds were well tolerated by rats indicating poor absorption.

CHRONIC EXPOSURE:

TANTALUM: Animal studies indicate absorption may occur.

SECTION 12 ECOLOGICAL INFORMATION

Not available

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable regulations.

SECTION 14 TRANSPORT INFORMATION

No classification assigned.

LAND TRANSPORT ADR/RID: No classification assigned.

AIR TRANSPORT IATA/ICAO: No classification assigned.

MARITIME TRANSPORT IMDG: No classification assigned.

SECTION 15 REGULATORY INFORMATION

U.S. REGULATIONS:

TSCA INVENTORY STATUS: Y

TSCA 12(b) EXPORT NOTIFICATION: Not listed.

CERCLA SECTION 103 (40CFR302.4): N

SARA SECTION 302 (40CFR355.30): N

SARA SECTION 304 (40CFR355.40): N

SARA SECTION 313 (40CFR372.65): N

SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21):

ACUTE: Y

CHRONIC: N

FIRE: Y

REACTIVE: Y

SUDDEN RELEASE: N

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OSHA PROCESS SAFETY (29CFR1910.119): N

STATE REGULATIONS:

California Proposition 65: N

EUROPEAN REGULATIONS:

EC NUMBER (EINECS): 231-135-5

EC RISK AND SAFETY PHRASES:

R 17 Spontaneously flammable in air.

GERMAN REGULATIONS:

WATER HAZARD CLASS (WGK): 0 (Official German Classification)

SECTION 16 OTHER INFORMATION

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J.5 FEDWIRE PROCEDURES

The Sender should use a bank that offers wire transfer capability. The Federal Reserve Bank of New York will then process the money for deposit to the Defense National Stockpile Account with the Department of the Treasury.

PROCEDURES FOR DEPOSIT SLIP(S) FOR FEDWIRE:

To ensure the funds are credited to the Defense National Stockpile Center the following information is required on any wire transfer of funds.

1. Treasury Dept. Code – Routing No. to the Treasury
MUST BE ON SLIP “021030004”.
2. Amount of funds to be transferred.
3. Treasury Department Name – **This item is critical**–
MUST APPEAR EXACTLY AS SHOWN BELOW
TREAS NYC/(CTR/BNF=/AC-00006355)
4. Third Party Information – Purchaser’s Name,
Commodity, and Contract Number.