



IN REPLY
REFER TO **DNCS-CC**

**DEFENSE LOGISTICS AGENCY
DEFENSE NATIONAL STOCKPILE CENTER
8725 JOHN J. KINGMAN ROAD, SUITE 3229
FT. BELVOIR, VIRGINIA 22060-6223**

December 15, 2006

**AMENDMENT NO. 019 TO
INVITATION FOR BIDS FOR
ACID GRADE FLUORSPAR AND
METALLURGICAL GRADE FLUORSPAR
UNDER DLA-FLUORSPAR-002**

The above referenced Invitation for Bids for the sale of Acid Grade Fluorspar and Metallurgical Grade Fluorspar is hereby amended as follows:

1. The next scheduled opening date will be **Tuesday, January 23, 2007, at 2:30 PM**, local time, Fort Belvoir, VA. Subsequent bid openings will be announced by separate amendment.
2. Amendment Nos. 008, 009, 010, 012, 013, 014, 016, 017, and 018 are hereby deleted in their entirety.
3. Section **B.3 Minimum Quantity (JAN 95)** is hereby deleted in its entirety and replaced as follows:

B.3 Minimum Quantity (DEC 06)

The minimum bid for material shall be for a full line item for Metallurgical Grade Fluorspar. A bid for less than the minimum quantity may render the bidder ineligible for award.

4. **Subsection E.1 Removal of Material (JAN 02), paragraph a.**, is deleted in its entirety and replaced with the following:

- a. The contract period is 180 calendar days and begins on the date of contract award. The contract period is further specified below:

For Item 105 (Pile Material):

Quantity Awarded (SDT)	Contract Period (Calendar Days)
7,691.99 SDT (or actual full pile quantity)	180 Calendar Days

5. Section **F.1 Request for Shipment**, paragraph **g.**, is deleted in its entirety and the following inserted therefor:

g. The Contractor, its agents 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, including the Environmental Safety and Occupational Health Policy of the Defense National Stockpile Center. See also Section **F.10 Environmental Policy (NOV 05)**.

6. Insert the following as Section **F.10 Environmental Policy (NOV 05)**:

F.10 Environmental Policy (NOV 05)

The Contractor, its agents and employees shall comply with the Environmental Safety and Occupational Health Policy of the Defense National Stockpile Center while on storage facilities where stockpile material is stored. The Contractor shall review information on DNSC's Environmental Safety and Occupational Health Policy on the DNSC Website at <https://www.dnsc.dla.mil> by clicking on "I Am The Key."

7. In Section **G – CONTRACT ADMINISTRATION DATA**, add the following as Section **G.13**:

Section G.13 Applicable Law for Breach of Contract Claim (JUL 06)

United States law will apply to resolve any claim of breach of this contract.

8. Sections **I.2b. Item Bid Page – DLA-Fluorspar-002 Metallurgical Grade Fluorspar**, and **J.2.b. ANALYSIS OF MATERIAL Metallurgical Grade Fluorspar** are hereby replaced with the attached updated listings. Please note that the material listed in Section **I.2b. Item Bid Page - DLA-Fluorspar-002 - Metallurgical Grade Fluorspar (DEC 06)** represents the remaining fluorspar material in the DNSC inventory.

9. In Section **I – SUBMITTALS**, add the attached Section **I.8 Disputes: Agreement to Use Alternative Dispute Resolution (JUL 06)**. This section should be submitted with a bid along with the other submittals identified in Section I.

10. Delete Section **J.4 MATERIAL SAFETY DATA SHEET (JUN 05) METALLURGICAL GRADE FLUORSPAR** in its entirety and insert the attached Section **J.4 MATERIAL SAFETY DATA SHEET METALLURGICAL GRADE FLUORSPAR (SEP 06)** therefor.

11. Bidders shall acknowledge receipt of this Amendment by signing in the space provided below and returning this form along with their bid to:

ATTN: DNSC-R (Bid Custodian)
Defense National Stockpile Center
8725 John J. Kingman Road, Suite 3229
Fort Belvoir, VA 22060-6223
Facsimile No.: (703) 767-5541

Failure to acknowledge receipt of this Amendment may result in a Bidder being ineligible for award.

12. Except as provided herein, all other terms and conditions of Invitation for Bids DLA-FLUORSPAR-002, as amended by Amendments No. 001, 002, 007, 011, and 015 thereto, remain unchanged and in full force and effect.

NAME OF FIRM: _____

ADDRESS: _____

TELEPHONE: _____ **FACSIMILE:** _____

COMPLETED BY: _____

SIGNATURE: _____ **DATE:** _____

TITLE: _____

WEB PAGE: _____ **E-MAIL ADDRESS:** _____

Invitation for Bids DLA-FLUORSPAR-002, Amendments No. 001, 002, 007, 011, 015 and this amendment are available on the DNSC Website: <https://www.dnsc.dla.mil>

I.2.b. Item Bid Page - DLA-Fluorspar-002 - Metallurgical Grade Fluorspar (DEC 06)

Item	Location	Pile	Type	Origin	Net Weight (SDT)	Unit Price Per SDT	Quantity (SDT)	Total Bid Price
105	New Haven, IN	98	Grade B	Domestic	7,691.99			
Total					7,691.99			

This represents all remaining fluorspar material in the DNSC inventory.
 Bids must be for the full line item quantity only.

Name of company: _____

Bidder's name and title: _____

Bidder's signature: _____

Date: _____

J.2.b. ANALYSIS OF MATERIAL - Metallurgical Grade Fluorspar (DEC 06)

*									
Item	Location	Pile	Type	Origin	CaF2	SiO2	S	Pb	% Passing # 16 Sieve
105	New Haven, IN	98	Grade B	Domestic	63.84%	4.84%	----	---	13.12

*DNSC Analysis of record

I.8 Disputes: Agreement to Use Alternative Dispute Resolution (JUL 06)

- a.** The parties agree to negotiate with each other to try to resolve any disputes that may arise. If unassisted negotiations are unsuccessful, the parties will use alternative dispute resolution (ADR) techniques to try to resolve the dispute. Litigation will only be considered as a last resort when ADR is unsuccessful or has been documented by the party rejecting ADR to be inappropriate for resolving the dispute.
- b.** Before either party determines ADR inappropriate, that party must discuss the use of ADR with the other party. The documentation rejecting ADR must be signed by an official authorized to bind the contractor, or, for the Agency, by the contracting officer, and approved at a level above the contracting officer after consultation with the ADR Specialist and with legal counsel. Contractor personnel are also encouraged to include the ADR Specialist in their discussions with the contracting officer before determining ADR to be inappropriate.
- c.** If you wish to opt out of this clause, check here (___). Alternate wording may be negotiated with the contracting officer.

J.4 MATERIAL SAFETY DATA SHEET METALLURGICAL GRADE FLUORSPAR (SEP 06)

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: FLUORSPAR, METALLURGICAL

TRADE NAMES/SYNONYMS:
DLA10003

CREATION DATE: Jul 01 1992

REVISION DATE: Sep 14 2006

2. COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENT: CALCIUM FLUORIDE
CAS NUMBER: 7789-75-5
EC NUMBER (EINECS): 232-188-7
PERCENTAGE: >70.00

COMPONENT: SULFRAMIN 40
CAS NUMBER: 12627-25-7
EC NUMBER: Not assigned.
PERCENTAGE: <0.10

COMPONENT: LEAD
CAS NUMBER: 7439-92-1
EC NUMBER (EINECS): 231-100-4
PERCENTAGE: <0.25

COMPONENT: ARSENIC
CAS NUMBER: 7440-38-2
EC NUMBER (EINECS): 231-148-6
PERCENTAGE: <0.01

COMPONENT: BARIUM
CAS NUMBER: 7440-39-3
EC NUMBER (EINECS): 231-149-1
PERCENTAGE: <0.01

COMPONENT: ZINC
CAS NUMBER: 7440-66-6
EC NUMBER (EINECS): 231-175-3
PERCENTAGE: <0.01

COMPONENT: PICRIC ACID

CAS NUMBER: 88-89-1
EC NUMBER (EINECS): 201-865-9
PERCENTAGE: <0.25

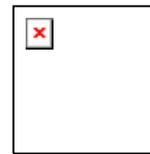
COMPONENT: COPPER
CAS NUMBER: 7440-50-8
EC NUMBER (EINECS): 231-159-6
PERCENTAGE: <0.10

COMPONENT: ANTIMONY
CAS NUMBER: 7440-36-0
EC NUMBER (EINECS): 231-146-5
PERCENTAGE: <0.02

COMPONENT: TIN
CAS NUMBER: 7440-31-5
EC NUMBER (EINECS): 231-141-8
PERCENTAGE: <0.02

3. HAZARDS IDENTIFICATION

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



EMERGENCY OVERVIEW:

PHYSICAL DESCRIPTION: White, yellow, green, or purple crystals or powder.

MAJOR HEALTH HAZARDS: mucous membrane burns, suspect cancer hazard (in animals)

POTENTIAL HEALTH EFFECTS:

INHALATION:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: same as effects reported in long term ingestion, irritation, nosebleed, loss of voice, asthma, lung damage

SKIN CONTACT:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: irritation

EYE CONTACT:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: irritation

INGESTION:

SHORT TERM EXPOSURE: burns, changes in blood pressure, nausea, vomiting, diarrhea, stomach pain, difficulty breathing, irregular heartbeat, headache, disorientation, difficulty speaking, pain in extremities, tremors, visual disturbances, dilated pupils, bluish skin color, internal bleeding, kidney damage, unconsciousness, coma

LONG TERM EXPOSURE: irritation, nausea, vomiting, diarrhea, constipation, loss of appetite, weight loss, blood disorders

CARCINOGEN STATUS:

OSHA: No

NTP: No

IARC: Yes

4. FIRST AID MEASURES

INHALATION: If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

SKIN CONTACT: Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

EYE CONTACT: Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

INGESTION: If a large amount is swallowed, get medical attention.

5. FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARDS: Negligible fire hazard.

EXTINGUISHING MEDIA: Use extinguishing agents appropriate for surrounding fire.

FIRE FIGHTING: Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

6. ACCIDENTAL RELEASE MEASURES

WATER RELEASE:

Subject to California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). Keep out of water supplies and sewers.

OCCUPATIONAL RELEASE:

Large spills: Collect spilled material in appropriate container for disposal. Avoid generating dust. Clean up residue with a high-efficiency particulate filter vacuum. Notify Local Emergency Planning Committee and State Emergency Response Commission for release greater than or equal to RQ (U.S. SARA Section 304). If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800)424-8802 (USA) or (202)426-2675 (USA).

7. HANDLING AND STORAGE

STORAGE: Store and handle in accordance with all current regulations and standards. Keep separated from incompatible substances.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS:

CALCIUM FLUORIDE:

INORGANIC FLUORIDES (as F):

2.5 mg/m³ OSHA TWA

2.5 mg/m³ ACGIH TWA

2.5 mg/m³ NIOSH recommended TWA 10 hour(s)

1 mg/m³ DFG MAK (peak limitation category - II, with excursion factor of 4) (inhalable fraction) (cutaneous absorption danger)

2.5 mg/m³ EC OEL TWA (IOELV)

2.5 mg(F)/m³ UK WEL TWA

MEASUREMENT METHOD: Treated pad with pre-filter (with special coating); Reagent; Ion-specific electrode; NIOSH III # 7902, Fluorides

LEAD:

If an employee is exposed to lead for more than 8 hours in any work day, the permissible exposure limit, as a time weighted average (TWA) for that day, shall be reduced according to the following formula: Maximum permissible limit (in ug/m³) = 400 divided by hours worked in the day.

LEAD, INORGANIC FUMES AND DUST (as Pb):

50 ug/m³ OSHA TWA 8 hour(s)

30 ug/m³ OSHA action level 8 hour(s)

0.05 mg/m³ ACGIH TWA

0.050 mg/m³ NIOSH recommended TWA 10 hour(s) (metal and compounds)

0.15 mg/m³ EC OEL TWA (BOELV)

MEASUREMENT METHOD: NIOSH IV # 7082, 7105, 7300, 7301, 7303, 7700, 7701, 7702, 9102, 9105; OSHA ID121, ID125G, ID206

VENTILATION: Provide local exhaust ventilation system. 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: Wear appropriate chemical resistant clothing.

GLOVES: Wear appropriate chemical resistant gloves.

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

Measurement Element:

F

12.5 mg/m³

Any dust and mist respirator.

25 mg/m³

Any dust and mist respirator except single-use and quarter-mask respirators.

Any supplied-air respirator.

62.5 mg/m³

Any supplied-air respirator operated in a continuous-flow mode.

Any powered, air-purifying respirator with a dust and mist filter.

May need acid gas sorbent.

125 mg/m³

Any air-purifying respirator with a full facepiece and a high-efficiency particulate filter.

May need acid gas sorbent.

Any self-contained breathing apparatus with a full facepiece.

Any supplied-air respirator with a full facepiece.

250 mg/m³

Any supplied-air respirator with a full facepiece that is 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.

May need acid gas sorbent.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION: White, yellow, green, or purple crystals or powder.

BOILING POINT: Not applicable

MELTING POINT: 2462 F (1350 C)

VAPOR PRESSURE: Not applicable

VAPOR DENSITY: Not applicable

SPECIFIC GRAVITY (water=1): 3.2

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: ammonium salt solutions

10. STABILITY AND REACTIVITY

REACTIVITY: Stable at normal temperatures and pressure.

CONDITIONS TO AVOID: Avoid generating dust.

INCOMPATIBILITIES: acids

CALCIUM FLUORIDE:

ACIDS (CONCENTRATED): Reacts vigorously evolving toxic fumes of hydrogen fluoride.

HAZARDOUS DECOMPOSITION:

Thermal decomposition products: acid halides

POLYMERIZATION: Will not polymerize.

11. TOXICOLOGICAL INFORMATION

CALCIUM FLUORIDE:

TOXICITY DATA:

4250 mg/kg oral-rat LD50; >1500 mg/kg intraperitoneal-rat LD50; 2638 mg/kg intraperitoneal-mouse LD50; >5 gm/kg oral-guinea pig LDLo; >10 gm/kg intraperitoneal-mammal LD; 4417 mg/kg oral-rat LD50; 44 gm/kg/31 day(s) intermittent oral-rat TDLo

CARCINOGEN STATUS: ACGIH: A4 -Not Classifiable as a Human Carcinogen (Fluorides)

LOCAL EFFECTS:

Corrosive: ingestion

ACUTE TOXICITY LEVEL:

Moderately Toxic: ingestion

MUTAGENIC DATA:

cytogenetic analysis - rat Ascites tumor 1 gm/kg

REPRODUCTIVE EFFECTS DATA:

3200 mg/kg intraperitoneal-mouse TDLo 9 day(s) pregnant female continuous; 67200 mg/kg intraperitoneal-mouse TDLo 1-21 day(s) pregnant female continuous

LEAD:

TOXICITY DATA:

450 mg/kg/6 year(s) oral-woman TDLo; 10 ug/m3 inhalation-human TCLo; 1 gm/kg intraperitoneal-rat LDLo; 160 mg/kg oral-pigeon LDLo; 271 mg/m3 inhalation-human LCLo; 155 mg/kg oral-human LDLo; 50 mg/kg intraperitoneal-rabbit TDLo; 1050 ug/kg/30 week(s) intermittent oral-rat TDLo; 6879 mg/kg/5 week(s) continuous oral-mouse TDLo; 20 mg/m3/6 hour(s)-30 day(s) intermittent inhalation-guinea pig TCLo; 200 ug/m3/6 hour(s)-26 week(s) intermittent inhalation-guinea pig TCLo; 582 mg/kg/30 day(s) continuous oral-non-mammalian species TDLo; 4099.2 mg/kg/8 week(s) intermittent oral-mouse TDLo; 10248 mg/kg/20 week(s) intermittent oral-mouse TDLo; 9.9 mg/m3/122 day(s) intermittent inhalation-human TCLo; 0.011 mg/m3/26 week(s) intermittent inhalation-human TCLo; 0.012 mg/kg/10 day(s) intermittent unreported-rat TDLo; 0.012 mg/kg/10 day(s) intermittent unreported-rat TDLo; 120 mg/kg/60 day(s) intermittent unreported-horse, donkey TDLo; 93.6 mg/kg/30 day(s) continuous oral-rat TDLo; 0.03 mg/m3/1 year(s) intermittent inhalation-man TCLo; 0.03 mg/m3/5 year(s) intermittent inhalation-man TCLo; 0.109 mg/m3/5 year(s) intermittent inhalation-man TCLo; 43.75 mg/kg/1 week(s) continuous oral-rat TDLo

CARCINOGEN STATUS: IARC: Human Inadequate Evidence, Animal Sufficient Evidence, Group 2B (Lead and inorganic lead compounds); ACGIH: A3 -Animal Carcinogen (Lead and inorganic lead compounds)

Renal tumors were produced in animals by lead acetate, subacetate and phosphate given orally, subcutaneously or intraperitoneally. No evaluation could be made of the carcinogenicity of powdered lead.

ACUTE TOXICITY LEVEL: Insufficient Data.

TARGET ORGANS: nervous system, kidneys, teratogen

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: blood system disorders, gastrointestinal disorders, nervous system disorders, respiratory disorders

MUTAGENIC DATA:

cytogenetic analysis - human unreported 50 ug/m3; cytogenetic analysis - rat inhalation 23 ug/m3 16 week(s); cytogenetic analysis - monkey oral 42 mg/kg 30 week(s); DNA damage - human inhalation 4.2 ng/L 6 year(s)-intermittent

REPRODUCTIVE EFFECTS DATA:

790 mg/kg oral-rat TDLo multigenerations; 1140 mg/kg oral-rat TDLo 14 day(s) pre pregnancy/21 day(s) post pregnancy continuous; 520 mg/kg oral-rat TDLo 7-22 day(s) pregnant female/10 day(s) post pregnancy continuous; 1100 mg/kg oral-rat TDLo 1-22 day(s) pregnant female continuous; 10 mg/m3 inhalation-rat TCLo/24 hour(s) 1-21 day(s) pregnant female continuous; 3 mg/m3 inhalation-rat TCLo/24 hour(s) 1-21 day(s) pregnant female continuous; 1120 mg/kg oral-mouse TDLo multigenerations; 6300 mg/kg oral-mouse TDLo 1-21 day(s) pregnant female continuous; 300 mg/kg oral-mouse TDLo 1-2 day(s) pregnant female continuous; 4800 mg/kg oral-mouse TDLo 1-16 day(s) pregnant female continuous; 662 mg/kg oral-domestic animal TDLo 1-21 week(s) pregnant female continuous; 814 mg/kg oral-domestic animal TDLo 5 week(s) pre pregnancy/1-21 week(s) pregnant female continuous; 2118 mg/kg oral-mammal TDLo 15 day(s) post pregnancy continuous; 4099.2 mg/kg oral-mouse TDLo 56 day(s) male; 24 ug/kg oral-mouse TDLo multigenerations

ADDITIONAL DATA: May cross the placenta. Smoking may result in higher blood lead levels. May be excreted in breast milk.

HEALTH EFFECTS:

INHALATION:

ACUTE EXPOSURE:

CALCIUM FLUORIDE: Dust may cause irritation of the respiratory system.

CHRONIC EXPOSURE:

CALCIUM FLUORIDE: Workers repeatedly exposed to fluorspar, which contains silica, showed pulmonary changes including fibrosis and emphysema and increased incidences of lung cancer. Repeated or prolonged exposure to fluoride dust may cause nosebleeds, hoarseness, sore throat, sinus trouble and asthma. Fluorosis, as detailed in chronic ingestion may also occur.

SKIN CONTACT:

ACUTE EXPOSURE:

CALCIUM FLUORIDE: May cause irritation.

CHRONIC EXPOSURE:

CALCIUM FLUORIDE: Repeated or prolonged contact with dusts containing fluoride may result in dermatitis.

EYE CONTACT:

ACUTE EXPOSURE:

CALCIUM FLUORIDE: Dust may cause irritation.

CHRONIC EXPOSURE:

CALCIUM FLUORIDE: Repeated or prolonged contact with fluoride dust may cause conjunctivitis.

INGESTION:

CALCIUM FLUORIDE: See information on inorganic fluorides.

ACUTE EXPOSURE:

INORGANIC FLUORIDES: In the presence of moisture, corrosive hydrogen fluoride may be formed, especially in the stomach. Symptoms may include a burning sensation in the mouth and abdomen, sore tongue, a salty or soapy taste, nausea, salivation, difficulty speaking, thirst, vomiting, diarrhea, anorexia, and weight loss. Intense epigastric pain, deep ulceration of the esophagus and mucous membranes, hematemesis, and hematuria may also be present. Shock, manifested by symptoms of hypotension, weak pulse, pallor, dilated pupils, cyanosis, and anuria may occur. Muscle weakness, twitching, epileptiform convulsions, paresthesias, paralysis of the muscles of deglutition, carpopedal spasms, and painful spasms of the extremities and facial muscles may result. Other symptoms may include shortness of breath, headache, occasional urticaria, albuminuria, petechial hemorrhages, nystagmus, visual disturbances, optic neuritis, mental deterioration, unconsciousness, and coma. Cardiac arrhythmias, including ventricular fibrillation, leading to cardiac arrest have been reported. Death may also be due to cardiovascular collapse or respiratory failure. In addition to the corrosive effects, symptoms of acute fluoride toxicity may be caused by a variety of metabolic disorders, including hypocalcemia, hypomagnesemia, acidosis, and hyperkalemia. Pathologic findings may include congestion and hemorrhagic infiltration of all organs and degeneration of the kidneys and liver. In non-fatal cases, malaise and epigastric pain may persist for several days.

CHRONIC EXPOSURE:

INORGANIC FLUORIDES: Repeated or prolonged ingestion may cause fluorosis characterized by nausea, vomiting, anorexia, diarrhea or constipation, weight loss, anemia, weakness and general ill health. Excessive calcification of the bones with brittleness, and calcification of the ligaments of the ribs, pelvis and spinal column may occur. Stiffness and limitation of motion may result. Polyuria and polydipsia may occur. A mottled appearance and altered form of the teeth may occur particularly during tooth formation. Exfoliative dermatitis, atopic dermatitis, stomatitis, gastrointestinal and respiratory allergy, and rarely, central nervous system involvement have been reported.

12. ECOLOGICAL INFORMATION

Not available

13. DISPOSAL CONSIDERATIONS

Hazardous Waste Number(s): D008. Dispose of in accordance with U.S. EPA 40 CFR 262 for concentrations at or above the Regulatory level. Regulatory level- 5.0 mg/L. Dispose in accordance with all applicable regulations.

14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION: No classification assigned.

CANADIAN TRANSPORTATION OF DANGEROUS GOODS: No classification assigned.

LAND TRANSPORT ADR: No classification assigned.

LAND TRANSPORT RID: No classification assigned.

AIR TRANSPORT IATA: No classification assigned.

AIR TRANSPORT ICAO: No classification assigned.

MARITIME TRANSPORT IMDG: No classification assigned.

15. REGULATORY INFORMATION

U.S. REGULATIONS:

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):

LEAD: 10 LBS RQ (solid metal particles < 100 micrometer diameter (0.004 inches))

ARSENIC: 1 LBS RQ

ZINC: 1000 LBS RQ

COPPER: 5000 LBS RQ

ANTIMONY: 5000 LBS RQ

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.30): Not regulated.

SARA TITLE III SECTION 304 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.40): Not regulated.

SARA TITLE III SARA SECTIONS 311/312 HAZARDOUS CATEGORIES (40 CFR 370.21):

ACUTE: Yes

CHRONIC: Yes

FIRE: No

REACTIVE: No

SUDDEN RELEASE: No

SARA TITLE III SECTION 313 (40 CFR 372.65):

LEAD

LEAD COMPOUNDS

OSHA PROCESS SAFETY (29CFR1910.119): Not regulated.

STATE REGULATIONS:

California Proposition 65:

Known to the state of California to cause the following:

LEAD

Cancer (Oct 01, 1992)

Developmental toxicity (Feb 27, 1987)

Male reproductive toxicity (Feb 27, 1987)

Female reproductive toxicity (Feb 27, 1987)

LEAD COMPOUNDS

Cancer (Oct 01, 1992)

Developmental toxicity (Feb 27, 1987)

Male reproductive toxicity (Feb 27, 1987)
Female reproductive toxicity (Feb 27, 1987)
ARSENIC
Cancer (Feb 27, 1987)

CANADIAN REGULATIONS:
WHMIS CLASSIFICATION: Not determined.

EUROPEAN REGULATIONS:
EC CLASSIFICATION (CALCULATED): Not determined.

NATIONAL INVENTORY STATUS:
U.S. INVENTORY (TSCA): Not listed on inventory.

TSCA 12(b) EXPORT NOTIFICATION: Not listed.

16. OTHER INFORMATION

MSDS SUMMARY OF CHANGES

11. TOXICOLOGICAL INFORMATION

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