

# CALCIUM ARSENITE

CAS

## CAUTIONARY RESPONSE INFORMATION

<b>Common Synonyms</b> Arsenous acid, calcium salt Calcium arsenite solid	Solid granular powder White Odorless
<p>Keep people away. AVOID CONTACT WITH SOLID. Wear goggles, self-contained breathing apparatus, protective clothing, and gloves. Notify local health and pollution control agencies. Protect water intakes.</p>	
<b>Fire</b>	Not flammable.
<b>Exposure</b>	<p>CALL FOR MEDICAL AID.</p> <p>SOLID Poisonous if swallowed. Irritating to skin, eyes, and nose. Move to fresh air. Remove contaminated clothing and shoes. Flush affected areas with plenty of water. IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk and have victim induce vomiting.</p>
<b>Water Pollution</b>	<p>HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS. May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes.</p>

### 1. CORRECTIVE RESPONSE ACTIONS

Stop discharge  
Contain  
Collection Systems: Dredge

### 2. CHEMICAL DESIGNATIONS

2.1 CG Compatibility Group: Not listed.  
2.2 Formula: Variable composition, CaAs<sub>2</sub>O<sub>4</sub>H  
2.3 IMO/UN Designation: 6.1/1574  
2.4 DOT ID No.: 1574  
2.5 CAS Registry No.: 52740-16-6  
2.6 NAERG Guide No.: 151  
2.7 Standard Industrial Trade Classification: 52499

### 3. HEALTH HAZARDS

- 3.1 **Personal Protective Equipment:** Hand and arm protection, protective clothing, waterproof boots, respiratory protective equipment, and eye protection.
- 3.2 **Symptoms Following Exposure:** INHALATION: Irritation of nose, laryngitis, bronchitis, huskiness of voice. Chronic exposure - perforation of nasal septum may occur. EYES: Irritation of conjunctiva, edema of eyelids may occur. Chronic exposure - conjunctivitis. SKIN: Skin eruptions and inflammation. Chronic exposure - irritation and occasionally ulceration. INGESTION: Dryness and irritation of mouth, difficulty in swallowing followed by vomiting, severe abdominal pain and diarrhea. Pain in limbs, headache, convulsions, muscular weakness and unconsciousness. Chronic exposure - weakness, loss of appetite, gastrointestinal disturbances, peripheral neuritis, occasionally hepatitis, and skin disorders such as keratitis and pigmentation.
- 3.3 **Treatment of Exposure:** Call a physician. INHALATION: Take victim to clean area. EYES: Flush with water. SKIN: Flush thoroughly with water. INGESTION: Induce vomiting, gastric lavage, catharsis. BAL given promptly.
- 3.4 TLV-TWA: Not listed.  
3.5 TLV-STEL: Not listed.  
3.6 TLV-Ceiling: Not listed.  
3.7 Toxicity by Ingestion: Currently not available  
3.8 Toxicity by Inhalation: Currently not available.  
3.9 **Chronic Toxicity:** See 5.2 (Chronic exposure). Available studies point consistently to a causal relationship between skin cancer and heavy exposure to inorganic arsenic. An increased frequency of deaths from lung cancer has been found in occupational groups exposed to high levels of inorganic arsenic compounds.
- 3.10 **Vapor (Gas) Irritant Characteristics:** Currently not available  
3.11 **Liquid or Solid Characteristics:** Currently not available  
3.12 **Odor Threshold:** Odorless  
3.13 **IDLH Value:** Not listed.  
3.14 **OSHA PEL-TWA:** Not listed.  
3.15 **OSHA PEL-STEL:** Not listed.  
3.16 **OSHA PEL-Ceiling:** Not listed.  
3.17 **EPA AEGL:** Not listed

### 4. FIRE HAZARDS

- 4.1 **Flash Point:**  
Not flammable
- 4.2 **Flammable Limits in Air:** Not flammable
- 4.3 **Fire Extinguishing Agents:** Not pertinent
- 4.4 **Fire Extinguishing Agents Not to Be Used:** Not pertinent
- 4.5 **Special Hazards of Combustion Products:** Not pertinent
- 4.6 **Behavior in Fire:** Currently not available
- 4.7 **Auto Ignition Temperature:** Not flammable
- 4.8 **Electrical Hazards:** Not pertinent
- 4.9 **Burning Rate:** Not flammable
- 4.10 **Adiabatic Flame Temperature:** Currently not available
- 4.11 **Stoichiometric Air to Fuel Ratio:** Not Pertinent
- 4.12 **Flame Temperature:** Currently not available
- 4.13 **Combustion Molar Ratio (Reactant to Product):** Not Pertinent
- 4.14 **Minimum Oxygen Concentration for Combustion (MOCC):** Not listed

### 5. CHEMICAL REACTIVITY

- 5.1 **Reactivity with Water:** No reaction
- 5.2 **Reactivity with Common Materials:** Not pertinent
- 5.3 **Stability During Transport:** May decompose by atmospheric CO<sub>2</sub>. No hazardous decomposition.
- 5.4 **Neutralizing Agents for Acids and Caustics:** Not pertinent
- 5.5 **Polymerization:** Not pertinent
- 5.6 **Inhibitor of Polymerization:** Not pertinent

### 6. WATER POLLUTION

- 6.1 **Aquatic Toxicity:**  
Fish toxicity critical concentration 1 mg/l
- 6.2 **Waterfowl Toxicity:** Currently not available
- 6.3 **Biological Oxygen Demand (BOD):**  
Currently not available
- 6.4 **Food Chain Concentration Potential:**  
Currently not available
- 6.5 **GESAMP Hazard Profile:**  
Bioaccumulation: 0  
Damage to living resources:  
Human Oral hazard:  
Human Contact hazard:  
Reduction of amenities:

### 7. SHIPPING INFORMATION

- 7.1 **Grades of Purity:** Currently not available
- 7.2 **Storage Temperature:** Currently not available
- 7.3 **Inert Atmosphere:** Currently not available
- 7.4 **Venting:** Currently not available
- 7.5 **IMO Pollution Category:** Currently not available
- 7.6 **Ship Type:** Currently not available
- 7.7 **Barge Hull Type:** Currently not available

### 8. HAZARD CLASSIFICATIONS

- 8.1 **49 CFR Category:** Poison
- 8.2 **49 CFR Class:** 6.1
- 8.3 **49 CFR Package Group:** II
- 8.4 **Marine Pollutant:** Yes
- 8.5 **NFPA Hazard Classification:** Not listed
- 8.6 **EPA Reportable Quantity:** 1 pound
- 8.7 **EPA Pollution Category:** X
- 8.8 **RCRA Waste Number:** Not listed
- 8.9 **EPA FWPCA List:** Yes

### 9. PHYSICAL & CHEMICAL PROPERTIES

- 9.1 **Physical State at 15° C and 1 atm:** Solid
- 9.2 **Molecular Weight:** 164.0
- 9.3 **Boiling Point at 1 atm:** Not pertinent
- 9.4 **Freezing Point:** Not pertinent
- 9.5 **Critical Temperature:** Currently not available
- 9.6 **Critical Pressure:** Currently not available
- 9.7 **Specific Gravity:** Currently not available
- 9.8 **Liquid Surface Tension:** Not pertinent
- 9.9 **Liquid Water Interfacial Tension:** Not pertinent
- 9.10 **Vapor (Gas) Specific Gravity:** Not pertinent
- 9.11 **Ratio of Specific Heats of Vapor (Gas):**  
Not pertinent
- 9.12 **Latent Heat of Vaporization:** Not pertinent
- 9.13 **Heat of Combustion:** Currently not available
- 9.14 **Heat of Decomposition:** Currently not available
- 9.15 **Heat of Solution:** Currently not available
- 9.16 **Heat of Polymerization:** Not pertinent
- 9.17 **Heat of Fusion:** Currently not available
- 9.18 **Limiting Value:** Currently not available
- 9.19 **Reid Vapor Pressure:** Currently not available

### NOTES

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9.20 SATURATED LIQUID DENSITY		9.21 LIQUID HEAT CAPACITY		9.22 LIQUID THERMAL CONDUCTIVITY		9.23 LIQUID VISCOSITY	
Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F	Temperature (degrees F)	British thermal unit inch per hour-square foot-F	Temperature (degrees F)	Centipoise
	N O T  P E R T I N E N T		N O T  P E R T I N E N T		N O T  P E R T I N E N T		N O T  P E R T I N E N T

9.24 SOLUBILITY IN WATER		9.25 SATURATED VAPOR PRESSURE		9.26 SATURATED VAPOR DENSITY		9.27 IDEAL GAS HEAT CAPACITY	
Temperature (degrees F)	Pounds per 100 pounds of water	Temperature (degrees F)	Pounds per square inch	Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F
	I N S O L U B L E		N O T  P E R T I N E N T		N O T  P E R T I N E N T		N O T  P E R T I N E N T