CALCIUM ARSENATE

CCA

CAUTIONARY RESPONSE INFORMATION

Common Synonyms			
Cucumber dust Tricalcium arsenate Tricalcium ortho arsenate	Solid Sinks in water.	White	Odorless

KEEP PEOPLE AWAY. AVOID CONTACT WITH SOLID AND DUST.
Wear a dust respirator.
Notify local health and pollution control agencies.
Protect water intakes.

Fire

Not flammable.
POISONOUS GASES MAY BE PRODUCED IN FIRE.
Wear goggles and self-contained breathing apparatus.

Exposure

CALL FOR MEDICAL AID.
DUST
POISONOUS IF INHALED.
If inhaled will cause coughing or difficult breathing.
If in eyes, hold eyelids open and flush with plenty of water.
If breathing is difficult, give oxygen.

SOLID
POISONOUS IF SWALLOWED.
If swallowed will cause nausea and vomiting.
Remove contaminated clothing and shoes.
Flush affected areas with plenty of water.
IF IN EYES, hold eyelids open and flush with plenty of water.
IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk and have victim induce vomiting.
IF SWALLOWED and victim is UNCONSCIOUS OR HAVING CONVULSIONS, do nothing except keep victim warm.

Water Pollution

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.

1. CORRECTIVE RESPONSE ACTIONS

Stop discharge
Collection Systems: Dredge
Contain

2. CHEMICAL DESIGNATIONS

2.1 CG Compatibility Group: Not listed.
2.2 Formula: $Ca_3(AsO_4)_2$
2.3 IMO/UN Designation: 6.1/1573
2.4 DOT ID No.: 1573
2.5 CAS Registry No.: 7778-44-1
2.6 NAERG Guide No.: 151
2.7 Standard Industrial Trade Classification: 52499

3. HEALTH HAZARDS

3.1 Personal Protective Equipment: Dust mask; goggles or face shield; protective gloves.
3.2 Symptoms Following Exposure: Inhalation causes respiratory irritation. Ingestion causes irritation of mouth and stomach. Contact with eyes causes irritation.
3.3 Treatment of Exposure: INHALATION: move to fresh air. INGESTION: give victim one tablespoonful of salt in glass of water; repeat until vomit is clear; then give 2 tablespoonfuls of Epsom salts or milk of magnesia and force fluids; call a physician in all cases of suspected poisoning. EYES: flush with water for at least 15 min. SKIN: flush with water; wash with soap and water.
3.4 TLV-TWA: Not listed.
3.5 TLV-STEL: Not listed.
3.6 TLV-Ceiling: Not listed.
3.7 Toxicity by Ingestion: Grade 4; oral rat LD_{50} = 20 mg/kg
3.8 Toxicity by Inhalation: Currently not available.
3.9 Chronic Toxicity: Arsenic compounds may cause skin and lung cancer.
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: 5 mg/m^3 as Arsenic
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: Toxic arsenic fume may be formed in fires.
4.6 Behavior in Fire: Currently not available
4.7 Auto Ignition Temperature: Not pertinent
4.8 Electrical Hazards: Not pertinent
4.9 Burning Rate: Not pertinent
4.10 Adiabatic Flame Temperature: Currently not available
4.11 Stoichometric 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: Currently not available
5.3 Stability During Transport: Stable
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: 1.1 ppm/48 hr/perch/toxic/fresh water 4.3 ppm/264 hr/crabs/toxic/fresh water
6.2 Waterfowl Toxicity: Currently not available
6.3 Biological Oxygen Demand (BOD): None
6.4 Food Chain Concentration Potential: Possible bioaccumulation problem
6.5 GESAMP Hazard Profile:
Bioaccumulation: 0
Damage to living resources: 3
Human Oral hazard: 3
Human Contact hazard: I
Reduction of amenities: XX

7. SHIPPING INFORMATION

7.1 Grades of Purity: 70%, containing calcium carbonate and calcium hydroxide (limestone and slaked lime)
7.2 Storage Temperature: Ambient
7.3 Inert Atmosphere: No requirement
7.4 Venting: Open
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: 398
9.3 Boiling Point at 1 atm: Not pertinent
9.4 Freezing Point: Not pertinent
9.5 Critical Temperature: Not pertinent
9.6 Critical Pressure: Not pertinent
9.7 Specific Gravity: 3.62 at 20°C (solid)
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: Not pertinent
9.14 Heat of Decomposition: Not pertinent
9.15 Heat of Solution: Not pertinent
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
	NOT PERTINENT		NOT PERTINENT		NOT PERTINENT		NOT PERTINENT

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
68	0.013		NOT PERTINENT		NOT PERTINENT		NOT PERTINENT