POTASSIUM ARSENATE

CAUTIONARY RESPONSE INFORMATION Common Synonyms Solid Macquer's salt Potassium acid arsenate Potassium dihydrogen arsenate Mixes with water Stay upwind. Use water spray to ``knock down" dust. KEEP PEOPLE AWAY. AVOID CONTACT WITH SOLID AND DUST. Wear goggles and dust respirator. Notify local health and pollution control agencies. Not flammable. Fire CALL FOR MEDICAL AID. **Exposure** DUST POISONOUS IF INHALED OR SWALLOWED. Irritating to eyes, nose and throat. Move victim to fresh air. If in eyes, hold eyelids open and flush with plenty of water. If breathing is difficult, give oxyger POISONOUS IF SWALLOWED Irritating to skin and eyes. 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 CON-VULSIONS, do nothing except keep victim warm HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS. Water May be dangerous if it enters water intakes Notify local health and wildlife officials. Notify operators of nearby water intakes. **Pollution**

1. CORRECTIVE RESPONSE ACTIONS

Stop discharge

2. CHEMICAL DESIGNATIONS

- CG Compatibility Group: Not listed. 2.2 Formula: KH₂AsO₄

- Formula: KH2ASO. IMO/UN Designation: 6.1/1677 DOT ID No.: 1677 CAS Registry No.: 7784-41-0 NAERG Guide No.: 151 Standard Industrial Trade Classification: 2.7 52389

3. HEALTH HAZARDS

- 3.1 Personal Protective Equipment: Dust respirator; rubber gloves
- 3.2 Symptoms Following Exposure: Dust may irritate eyes. Ingestion or severe exposure by inhalation can cause burning of throat and mouth, abdominal pain, vomiting, diarrhea with hemorrhage, dehydration, jaundice, and collapse.
- 3.3 Treatment of Exposure: EYES: flush with water to remove dust. INGESTION: immediately induce evacuation of intestinal tract by inducing vomiting, giving gastric lavage and saline cathartic; see physician at once; consider possible development of arsenic poisoning.
- 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: May be carcinogenic; arsenic poisoning may develop. 3.10 Vapor (Gas) Irritant Characteristics: Currently not available
- 3.11 Liquid or Solid Characteristics: Currently not available
- 3.12 Odor Threshold: Not pertinent
- 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: Not pertinent 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
- 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: No
- 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:** 250 ppm as As/16 hr/minnows/survived
- 6.2 Waterfowl Toxicity: Currently not
- 6.3 Biological Oxygen Demand (BOD): None 6.4 Food Chain Concentration Potential:
- Currently not available
- 6.5 GESAMP Hazard Profile:

Bioaccumulation: 0
Damage to living resources: 3
Human Oral hazard: 2
Human Contact hazard: 0 Reduction of amenities: 0

7. SHIPPING INFORMATION

- 7.1 Grades of Purity: Commercial
- 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: No
- 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: 180.0
- 9.3 Boiling Point at 1 atm: Not pertinent (decomposes)
- 9.4 Freezing Point: 550°F = 288°C = 561°K
- 9.5 Critical Temperature: Not pertinent
- 9.6 Critical Pressure: Not pertinent
- 9.7 Specific Gravity: 2.8 at 20°C (solid)
- 9.8 Liquid Surface Tension: Not pertinent
- 9.9 Liquid Water Interfacial Tension: Not
- 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: 49 Btu/lb = 27 cal/g = 1.1 X 105 J/ka
- 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

POTASSIUM ARSENATE

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		N O T		N O T		N O T
	. PERT-NEXT		PERTINENT		. PERT - NENT		. PERT-NEXT

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	20.000		N O T		N O T		N O T
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