

ARSENIC TRISULFIDE

ART

CAUTIONARY RESPONSE INFORMATION				4. FIRE HAZARDS	7. SHIPPING INFORMATION								
Common Synonyms Arsenic yellow King's gold King's yellow Orpiment Yellow arsenic sulfide	Solid Sinks in water.	Yellow-orange 	Odorless	<p>4.1 Flash Point: Not flammable</p> <p>4.2 Flammable Limits in Air: Not pertinent</p> <p>4.3 Fire Extinguishing Agents: Water</p> <p>4.4 Fire Extinguishing Agents Not to Be Used: Not pertinent</p> <p>4.5 Special Hazards of Combustion Products: Poisonous fumes of the compound may be formed in fires.</p> <p>4.6 Behavior in Fire: May ignite at very high temperatures.</p> <p>4.7 Auto Ignition Temperature: Not pertinent</p> <p>4.8 Electrical Hazards: Not pertinent</p> <p>4.9 Burning Rate: Not pertinent</p> <p>4.10 Adiabatic Flame Temperature: Not pertinent</p> <p>4.11 Stoichiometric Air to Fuel Ratio: Not pertinent</p> <p>4.12 Flame Temperature: Not pertinent</p> <p>4.13 Combustion Molar Ratio (Reactant to Product): Currently not available</p> <p>4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed</p>	<p>7.1 Grades of Purity: Technical; Pure, 99+%; Optical grade, 99.99+%</p> <p>7.2 Storage Temperature: Ambient</p> <p>7.3 Inert Atmosphere: Not pertinent</p> <p>7.4 Venting: Open</p> <p>7.5 IMO Pollution Category: Currently not available</p> <p>7.6 Ship Type: Currently not available</p> <p>7.7 Barge Hull Type: Currently not available</p>								
Fire	Not flammable. Wear chemical protective suit with self-contained breathing apparatus.				8. HAZARD CLASSIFICATIONS								
Exposure	CALL FOR MEDICAL AID. DUST POISONOUS IF INHALED. Harmful to skin. Move to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen. SOLID POISONOUS IF SWALLOWED. Will burn eyes and skin. 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.			<p>8.1 49 CFR Category: Poison</p> <p>8.2 49 CFR Class: 6.1</p> <p>8.3 49 CFR Package Group: II</p> <p>8.4 Marine Pollutant: No</p> <p>8.5 NFPA Hazard Classification:</p> <table> <thead> <tr> <th>Category</th> <th>Classification</th> </tr> </thead> <tbody> <tr> <td>Health Hazard (Blue)</td> <td>3</td> </tr> <tr> <td>Flammability (Red)</td> <td>0</td> </tr> <tr> <td>Instability (Yellow)</td> <td>0</td> </tr> </tbody> </table> <p>8.6 EPA Reportable Quantity: 1</p> <p>8.7 EPA Pollution Category: X</p> <p>8.8 RCRA Waste Number: Not listed</p> <p>8.9 EPA FWCPC List: Yes</p>	Category	Classification	Health Hazard (Blue)	3	Flammability (Red)	0	Instability (Yellow)	0	9. PHYSICAL & CHEMICAL PROPERTIES
Category	Classification												
Health Hazard (Blue)	3												
Flammability (Red)	0												
Instability (Yellow)	0												
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.			<p>5. CHEMICAL REACTIVITY</p> <p>5.1 Reactivity with Water: No reaction</p> <p>5.2 Reactivity with Common Materials: Currently not available</p> <p>5.3 Stability During Transport: Stable</p> <p>5.4 Neutralizing Agents for Acids and Caustics: Not pertinent</p> <p>5.5 Polymerization: Not pertinent</p> <p>5.6 Inhibitor of Polymerization: Not pertinent</p>	<p>9.1 Physical State at 15° C and 1 atm: Solid</p> <p>9.2 Molecular Weight: 246</p> <p>9.3 Boiling Point at 1 atm: Not pertinent</p> <p>9.4 Freezing Point: 572°F = 300°C = 573°K</p> <p>9.5 Critical Temperature: Not pertinent</p> <p>9.6 Critical Pressure: Not pertinent</p> <p>9.7 Specific Gravity: 3.43 at 20°C (solid)</p> <p>9.8 Liquid Surface Tension: Not pertinent</p> <p>9.9 Liquid Water Interfacial Tension: Not pertinent</p> <p>9.10 Vapor (Gas) Specific Gravity: Not pertinent</p> <p>9.11 Ratio of Specific Heats of Vapor (Gas): Not pertinent</p> <p>9.12 Latent Heat of Vaporization: Not pertinent</p> <p>9.13 Heat of Combustion: Not pertinent</p> <p>9.14 Heat of Decomposition: Not pertinent</p> <p>9.15 Heat of Solution: Not pertinent</p> <p>9.16 Heat of Polymerization: Not pertinent</p> <p>9.17 Heat of Fusion: Currently not available</p> <p>9.18 Limiting Value: Currently not available</p> <p>9.19 Reid Vapor Pressure: Currently not available</p>								
1. CORRECTIVE RESPONSE ACTIONS Stop discharge Collection Systems: Dredge	2. CHEMICAL DESIGNATIONS 2.1 CG Compatibility Group: Not listed 2.2 Formula: As ₂ S ₃ 2.3 IMO/UN Designation: 6.1/1557 2.4 DOT ID No.: 1557 2.5 CAS Registry No.: 1303-33-9 2.6 NAERG Guide No.: 152 2.7 Standard Industrial Trade Classification: 52342			6. WATER POLLUTION	NOTES								
3. HEALTH HAZARDS													
3.1 Personal Protective Equipment: Self-contained breathing apparatus; goggles; rubber gloves; clean protective clothing													
3.2 Symptoms Following Exposure: (Acute and sub-acute poisoning are not common.) Repeated inhalation causes irritation of nose, laryngitis, mild bronchitis. Ingestion causes weakness, loss of appetite, gastrointestinal disturbances, peripheral neuritis, occasional hepatitis. Contact with eyes causes irritation. Irritates skin, especially where moist; if not treated, may cause ulceration.													
3.3 Treatment of Exposure: Consult physician after all overexposures to this compound. INHALATION: Move to fresh air. INGESTION: Induce vomiting by giving warm salt water; repeat until vomit is clear. EYES: Flush with water for at least 15 min. SKIN: Wash well with water.													
3.4 TLV-TWA: 0.01 mg/m ³ (as arsenic)													
3.5 TLV-STEL: Not listed.													
3.6 TLV-Ceiling: Not listed.													
3.7 Toxicity by Ingestion: Grade 4; LD ₅₀ <50 mg/kg													
3.8 Toxicity by Inhalation: Currently not available.													
3.9 Chronic Toxicity: Possible 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: 0.01 mg/m ³ as arsenic.													
3.15 OSHA PEL-STEL: Not listed.													
3.16 OSHA PEL-Ceiling: Not listed.													
3.17 EPA A EGL: Not listed													

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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
INSOLUBLE			NOT PERTINENT		NOT PERTINENT		NOT PERTINENT