

# POTASSIUM ARSENITE

1213  
April 2005

CAS No: 10124-50-2  
RTECS No: CG3800000  
UN No: 1678  
EC No: 033-002-00-5

Potassium metaarsenite  
Arsenious acid, potassium salt  
Potassium arsonate  
See Notes

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
<b>FIRE</b>	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: use appropriate extinguishing media.
<b>EXPLOSION</b>			

EXPOSURE		PREVENT DISPERSION OF DUST! AVOID ALL CONTACT! AVOID EXPOSURE OF (PREGNANT) WOMEN!	IN ALL CASES CONSULT A DOCTOR!
<b>Inhalation</b>	Cough. Headache. Laboured breathing. Sore throat. See Ingestion.	Closed system and ventilation.	Fresh air, rest. Refer for medical attention.
<b>Skin</b>	Redness. Pain.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.
<b>Eyes</b>	Redness. Pain.	Face shield or eye protection in combination with breathing protection if powder.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
<b>Ingestion</b>	Abdominal pain. Burning sensation in the throat and chest. Vomiting. Diarrhoea. Dizziness. Headache. Shock or collapse.	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Give a slurry of activated charcoal in water to drink. Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Personal protection: chemical protection suit including self-contained breathing apparatus. Do NOT let this chemical enter the environment. Sweep spilled substance into sealable plastic containers. Vacuum spilled material. (Vacuum only with special equipment.) Carefully collect remainder, then remove to safe place.	T Symbol N Symbol R: 23/25-50/53 S: (1/2-)20/21-28-45-60-61 Note: A, 1 UN Hazard Class: 6.1 UN Pack Group: II  Unbreakable packaging; put breakable packaging into closed unbreakable container. Do not transport with food and feedstuffs. Marine pollutant.

EMERGENCY RESPONSE	SAFE STORAGE
Transport Emergency Card: TEC (R)-61GT5-II	Separated from acids, strong oxidants, metals, food and feedstuffs. Dry. Well closed. Provision to contain effluent from fire extinguishing. Store in an area without drain or sewer access.

### IMPORTANT DATA

**Physical State; Appearance**

WHITE HYGROSCOPIC POWDER

**Chemical dangers**

Upon heating, toxic fumes are formed. Reacts with acids to produce toxic arsine gas (see ICSC 0222). Attacks many metals forming flammable/explosive gas (hydrogen - see ICSC 0001) and arsine.

**Occupational exposure limits**

TLV: (as As) 0.01 mg/m<sup>3</sup>; A1 (confirmed human carcinogen); BEI issued; (ACGIH 2005).  
MAK: (arsenic and inorganic arsenic compounds) Carcinogen category: 1; Germ cell mutagen group: 3A; (DFG 2004).

**Routes of exposure**

The substance can be absorbed into the body by inhalation of its aerosol and by ingestion.

**Inhalation risk**

A harmful concentration of airborne particles can be reached quickly when dispersed.

**Effects of short-term exposure**

The substance is irritating to the eyes, the skin and the respiratory tract. The substance may cause effects on the cardiovascular system, central nervous system, gastrointestinal tract and kidneys, resulting in severe gastroenteritis, loss of fluids and electrolytes, kidney impairment, cardiac disorders, collapse, shock. The effects may be delayed. Medical observation is indicated.

**Effects of long-term or repeated exposure**

Repeated or prolonged contact with skin may cause dermatitis, pigmentation disorders. The substance may have effects on the peripheral nervous system, bone marrow, kidneys, liver and mucous membranes, resulting in neuropathy, lesions of blood cells, kidney impairment, cirrhosis and perforation of nasal septum. This substance is carcinogenic to humans. Animal tests show that this substance possibly causes toxicity to human reproduction or development.

### PHYSICAL PROPERTIES

Decomposes below melting point at 300/C  
Density: 8.76 g/cm<sup>3</sup>

Solubility in water: good

### ENVIRONMENTAL DATA

The substance is toxic to aquatic organisms.

### NOTES

The compound has variable composition; the commercial grade formula corresponds approximately to KAsO<sub>2</sub>. HAsO<sub>2</sub>. Depending on the degree of exposure, periodic medical examination is suggested.  
Do NOT take working clothes home.  
Fowler's solution is a trade name.

### ADDITIONAL INFORMATION

**LEGAL NOTICE**

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible