

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name	Fowler's Solution, 0.09% Potassium Arsenite
CAS number	See Section 3
Synonyms	N/A

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	General Laboratory Reagent.
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#### 1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

#### 1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute Oral Toxicity	Category 4
Carcinogenicity	Category 1
Reproductive Toxicity	Category 1
Acute Aquatic Hazard	Category 3
Chronic Aquatic Hazard	Category 3

## 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

Harmful if swallowed.  
May cause cancer.  
May damage fertility or the unborn child.  
Harmful to aquatic life.

Precautionary statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash arms, hands, and face thoroughly after handling. Do not eat, drink, or smoke when using this product. Avoid release to the environment. Wear protective gloves and eye protection.

Response: IF exposed or concerned, get medical attention.

IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.

Storage: Store locked up.

Disposal: Dispose of contents in accordance with local, state, federal, and international regulations.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Data not available.

### SECTION 3: Composition/information on ingredients

#### 3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Water	Aqua: H <sub>2</sub> O	7732-18-5	96.11%
Potassium bicarbonate	Baking soda	298-14-6	0.684%
Arsenic trioxide	Arsenic(III) oxide	1327-53-3	0.90%
Ethanol	Ethyl alcohol	64-17-5	2.3%

### SECTION 4: First aid measures

#### 4.1 Description of first-aid measures

General advice

<b>If inhaled</b>	Not expected to require first aid. If necessary, remove to fresh air.
<b>In case of skin contact</b>	May cause irritation, redness, and pain.
<b>In case of eye contact</b>	May cause irritation and burns.
<b>If swallowed</b>	Call a POISON CENTER or physician if you feel unwell. Dilute immediately with water or milk. Induce vomiting.

#### 4.2 Most important symptoms and effects, both acute and delayed

WARNING! This solution is toxic and contains a known carcinogen. May be fatal if swallowed. May cause liver and kidney damage. If ingested, dilute immediately with water and induce vomiting. Call a physician. Wash areas of contact with plenty of water. For eyes, get medical attention. EYE CONTACT: May cause irritation and burns. SKIN CONTACT: May cause irritation, redness, and pain. CHRONIC EFFECTS / CARCINOGENICITY: Chronic exposure may lead to kidney and liver damage.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Not expected to require special treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	Use any means suitable for extinguishing surrounding fire.
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<b>Unsuitable extinguishing media</b>	No information available.
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### 5.2 Specific hazards arising from the substance or mixture

Not considered to be a fire or explosion hazard.

### 5.3 Special protective equipment and precautions for firefighters

Use protective clothing and breathing equipment appropriate for the surrounding fire.

### 5.4 Further information

<b>Flash Point</b>	No information available.
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**Autoignition Temperature** No information available.

**Explosion limits**

**Upper** No data available.

**Lower** No data available.

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

**NFPA**

Health	Flammability	Instability	Physical hazards
2	0	0	N/A

**SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective gloves and eye protection.

**6.2 Environmental precautions**

Do not flush to sewer.

**6.3 Methods and materials for containment and cleaning up**

Absorb with suitable material. Containerize for disposal with a hazardous waste disposal facility. Dispose of in accordance with local regulations.

**6.4 Reference to other sections**

See Section 2 for full list of hazard and precaution statements.

**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

**Precautions on safe handling**

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin.

**Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice.

**7.2 Conditions for safe storage, including any incompatibilities**

**Storage conditions**

Store locked up. Protect from freezing and physical damage.

**Incompatibilities**

Acids, Iron, Tannic Acid, Hydrogen Fluoride, Sodium Chlorate, Mercury.

**SECTION 8: Exposure controls/personal protection**

## 8.1 Occupational exposure limits

### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value	
Ethanol	(Vacated) TWA	1000 ppm	1900 mg/m <sup>3</sup>
	TWA	1000 ppm	1900 mg/m <sup>3</sup>

### US. ACGIH Threshold Limit Values

Component	Type	Value
Ethanol	STEL	1000 ppm
Arsenic trioxide	TWA	0.01 mg/m <sup>3</sup>

### US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value	
Ethanol	IDLH	3300 ppm	
	TWA	1000 ppm	1900 mg/m <sup>3</sup>
Arsenic trioxide	IDLH	5 mg/m <sup>3</sup>	
	Ceiling	0.002 mg/m <sup>3</sup>	

### Biological occupational exposure limits

No information available.

## 8.2 Exposure controls

### Appropriate engineering controls

No specific controls are needed. Normal room ventilation is adequate.

### Personal protective equipment

#### Eye/face protection

Wear eye protection. Safety glasses or goggles.

#### Skin protection

Wear protective gloves. Chemical resistant gloves.

#### Body Protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

#### Respiratory protection

Normal room ventilation is adequate.

#### Control of environmental exposure

No information available.

## SECTION 9: Physical and chemical properties

## 9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	Data not available
Odor Threshold	Data not available
pH	8
Melting Point/Range	100°C
Boiling Point/Range	Data not available
Evaporation Rate	Data not available
Flammability (solid)	Not applicable
Flammability or explosive limit	Data not available
Upper	
Lower	
Vapor Pressure	Data not available
Vapor Density	Data not available
Density	Data not available
Solubility	Data not available
Partition coefficient; n-octanol/water	Data not available
Autoignition Temp	Data not available
Decomposition Temp	Data not available
Viscosity	Data not available
Molecular Formula	N/A
Molecular Weight	N/A
VOC Content(%)	Data not available
Oxidizing properties	Data not available

## 9.2 Other safety information

No information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No information available.

### 10.2 Chemical stability

Stable under normal conditions of use and storage.

### 10.3 Possibility of hazardous reactions

No information available.

### 10.4 Conditions to avoid

Incompatible materials.

### 10.5 Incompatible materials

Acids, Iron, Tannic Acid, Hydrogen Fluoride, Sodium Chlorate, Mercury.

## 10.6 Hazardous decomposition products

Will not occur.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product Information, Component Information

##### Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium bicarbonate	-	> 2000 mg/kg (Rabbit)	> 4.88 mg/L (Rat) 4.5 h
Arsenic trioxide	20 mg/kg (Rat)	-	-
Ethanol	10470 mg/kg (Rat)	-	117-125 mg/L (Rat) 4 h

##### Skin corrosion/irritation

Not applicable.

##### Serious eye damage/eye irritation

Not applicable.

##### Respiratory or skin sensitization

Not applicable.

##### Germ cell mutagenicity

Not applicable.

##### Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
Potassium bicarbonate	298-14-6	Not listed	Not listed	Not listed	Not listed	Not listed
Arsenic trioxide	1327-53-3	Group 1	Known	A1	X	A1
Ethanol	64-17-5	Not listed	Known	A3	Not listed	A3

##### Specific target organ toxicity - single exposure

Not applicable.

##### Specific target organ toxicity - repeated exposure

Not applicable.

##### Reproductive toxicity

May damage fertility or the unborn child.

##### Chronic effects

Not applicable.

## 11.2 Additional Information

No information available.

## SECTION 12: Ecological information

### 12.1 Toxicity

Harmful to aquatic life. Avoid release to the environment. Dispose of contents in accordance with local, state, federal, and international regulations. Harmful to aquatic life.

### 12.2 Persistence and degradability

No information available.

### 12.3 Bio accumulative potential

No information available.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

No information available.

### 12.6 Endocrine disrupting properties

No information available.

### 12.7 Other adverse effects

No information available.

## SECTION 13: Disposal considerations

### 13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## SECTION 14: Transport information

**DOT (US)** Not regulated.

**IMDG** Not regulated.

**IATA** Not regulated.

## SECTION 15: Regulatory information



**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**  
Not applicable.

**CERCLA Hazardous Substance List (40 CFR 302.4)**  
Listed, Arsenic trioxide (CAS #1327-53-3), RQ: 1 lb.

**SARA 304 Emergency release notification**  
Listed, Arsenic trioxide (CAS #1327-53-3), RQ: 1 lb.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**  
Listed, Arsenic trioxide (CAS #1327-53-3).

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**  
Listed, Arsenic trioxide (CAS #1327-53-3), TPQ: 100/10,000 lb.

**SARA 311/312 Hazardous**  
See Section 2 for more information.

**SARA 313 (TRI reporting)**  
Listed, Arsenic trioxide (CAS #1327-53-3).

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**  
Listed, Arsenic trioxide (CAS #1327-53-3).

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**  
Not regulated.

**Clean Water Act (CWA)**  
Listed, Arsenic trioxide (CAS #1327-53-3), RQ: 1 lb.

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**  
Listed, Ethanol (CAS #64-17-5).

**US state regulations**

**US. Massachusetts RTK - Substance List**  
Listed, Ethanol (CAS #64-17-5).  
Listed, Arsenic trioxide (CAS #1327-53-3).

**US. New Jersey Worker and Community Right-to-Know Act**  
Listed, Ethanol (CAS #64-17-5).

Listed, Arsenic trioxide (CAS #1327-53-3).

**US. Pennsylvania Worker and Community Right-to-Know Law**

Listed, Ethanol (CAS #64-17-5).

Listed, Arsenic trioxide (CAS #1327-53-3).

**California Proposition 65**

Listed, Ethanol (CAS #64-17-5).

Listed, Arsenic trioxide (CAS #1327-53-3).

**SECTION 16: Other information**

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**SECTION 17: Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.