



Material Safety Data Sheet Phenylarsine Oxide Solutions

Section 1 - Chemical Product and Company Identification

MSDS Name:

Phenylarsine Oxide Solutions

Catalog Numbers:

LC18340, LC18360, LC18380, LC18390

Synonyms:

PAO Solutions, Phenylarsine oxide titrants

Company Identification:

LabChem Inc
200 William Pitt Way
Pittsburgh, PA 15238

Company Phone Number:

(412) 826-5230

Emergency Phone Number:

(800) 424-9300

CHEMTREC Phone Number:

(800) 424-9300

Section 2 – Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	>99
1310-73-2	Sodium hydroxide	0.1-0.5
637-03-6	Phenylarsine oxide	0.05-0.4

Section 3 - Hazards Identification

Emergency Overview

Appearance: Clear, colorless to slight yellow solution

Danger! Corrosive. Harmful if inhaled or ingested. Causes irritation to eyes, skin, respiratory and gastrointestinal tracts. May cause skin sensitization. Phenylarsine oxide is neurotoxic.

Target Organs: Central nervous system, liver, kidneys, eyes, skin, respiratory tract

Potential Health Effects

Eye:

Causes eye irritation and possible burns.

Skin:

Causes skin irritation and possible burns.

Ingestion:

May be harmful or fatal if swallowed. Causes central nervous system effects, headaches, dizziness, loss of consciousness, cardiovascular disorders, including possible failure, vomiting, spasms, and intestinal difficulties. Causes irritation to the gastrointestinal tract.



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Inhalation:

Causes irritation to the respiratory tract with coughing and breathing difficulties.

Chronic:

May cause injuries to the skin, alopecia, conjunctivitis, polyneuropathies, hepatic problems, and kidney problems. Arsenic accumulated in the liver, kidneys, and skin is eliminated very slowly.

Section 4 - First Aid Measures

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid at once. Do NOT allow victim to rub or keep eyes closed.

Skin:

Get medical aid at once. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid at once.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, highly toxic vapors may be released.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Autoignition Temperature:

Not applicable.

Flash Point:

Not applicable.

NFPA Rating:

CAS# 7732-18-5: Health- 0, Flammability- 0, Instability- 0.

CAS# 637-03-6: Health- 0, Flammability- 0, Instability- 0.

CAS# 1310-73-2: Health- 3, Flammability- 0, Instability- 1.

Explosion Limits:

Lower: n/a Upper: n/a

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.



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Spills/Leaks:

Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in plastic bags for later disposal. Keep out of sewers/drains.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.

Storage:

Store in a tightly closed container in a cool, dry, well-ventilated area away from incompatible materials.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None listed	None listed	None listed
Sodium hydroxide	2 mg/m ³ Ceiling	10 mg/m ³ IDLH	2 mg/m ³ TWA
Phenylarsine oxide	None listed	None listed	0.5 mg/m ³ TWA (as As) (listed under Arsenic organic compounds)

OSHA Vacated PELs:

None.

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State:	Liquid
Color:	Colorless to slight yellow
Odor:	Odorless
pH:	7-9
Vapor Pressure:	Not available



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Vapor Density:	Not available
Evaporation Rate:	Not available
Viscosity:	Not available
Boiling Point:	Not available
Freezing/Melting Point:	Not available
Decomposition Temperature:	Not available
Solubility in water:	Soluble
Specific Gravity/Density:	Not available
Molecular Formula:	Not available
Molecular Weight:	Not available

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials.

Incompatibilities with Other Materials:

Metals, acids, nitro compounds.

Hazardous Decomposition Products:

Arsine, carbon monoxide, carbon dioxide, sodium oxide fumes.

Hazardous Polymerization:

Has not been reported.

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000.

CAS# 1310-73-2: WB4900000.

CAS# 637-03-6: CH8100000.

LD50/LC50:

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg.

CAS# 1310-73-2:

Draize test, rabbit, eye: 50 ug/24H Severe.

Draize test, rabbit, skin: 500 mg/24H Severe.

CAS# 637-03-6:

Oral, rat: LD50 = 10-25 mg/kg.

Carcinogenicity:

CAS# 637-03-6: IARC Group 1 carcinogen (Arsenic compounds, n.o.s.)

Epidemiology:

No information found

Teratogenicity:

No information found

Reproductive:

No information found

Mutagenicity:

No information found



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Neurotoxicity:

No information found

Section 12 - Ecological Information

No information found

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Not regulated

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

US Federal

TSCA:

CAS# 7732-18-5 is listed on the TSCA Inventory.

CAS# 1310-73-2 is listed on the TSCA Inventory.

CAS# 637-03-6 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ):

CAS# 1310-73-2: final RQ = 1000 pounds (454 kg)

CERCLA/SARA Section 313:

This material contains Phenylarsine oxide (listed as Arsenic organic compounds), 97%, CAS# 637-03-6, which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 372.

OSHA - Highly Hazardous:

None of the chemicals in this product are considered highly hazardous by OSHA.

US State

State Right to Know:

Sodium hydroxide can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

Phenylarsine oxide can be found on the following state Right-to-Know lists: California (listed as Arsenic compounds, n.o.s.), New Jersey (listed as Arsenic compounds, n.o.s.), Pennsylvania (listed as Arsenic compounds, n.o.s.), Minnesota (listed as Arsenic organic compounds).

California Regulations:

None.



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European/International Regulations

Canadian DSL/NDSL:

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 1310-73-2 is listed on Canada's DSL List.

CAS# 637-03-6 is listed on Canada's DSL List.

Canada Ingredient Disclosure List:

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 1310-73-2 is listed on Canada's Ingredient Disclosure List.

CAS# 637-03-6 is not listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: May 6, 1998

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