Printing date 04/13/2021

Reviewed on 04/13/2021

1 Identification

- · Product identifier
- · Trade name: Phenylarsine Oxide, Technical Grade
- Article number: P2120
- · CAS Number:
- 637-03-6 · EC number:
- 211-275-3
- · Index number: 033-002-00-5
- · Details of the supplier of the safety data sheet · Manufacturer/Supplier: Aqua Solutions, Inc. 6913 Highway 225 DEER PARK, TX 77536 USA 800-256-2586
- · Information department: Technical Coordinator Sherman Nelson sherman@aquasolutions.org Technical Coordinator Sherman Nelson sherman@aquasolutions.org • Emergency telephone number: Chemtrec: 800-424-9300 Canutec: 613-996-6666

2 Hazard(s) identification

· Classification of the substance or mixture

GHS06 Skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed. Acute Tox. 3 H331 Toxic if inhaled.



Carc. 1A H350 May cause cancer.

· Label elements

• GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS). · Hazard pictograms



· Signal word Danger · Hazard statements Toxic if swallowed or if inhaled. May cause cancer.

(Contd. on page 2)

US

Printing date 04/13/2021

Reviewed on 04/13/2021

Trade name: Phenylarsine Oxide, Technical Grade

	(Contd. of page 1
· Precautionary statements	
Obtain special instructions before use.	
Do not handle until all safety precautions have been read and understood.	
Avoid breathing dust/fume/gas/mist/vapors/spray	
Wash thoroughly after handling.	
Do not eat, drink or smoke when using this product.	
Use only outdoors or in a well-ventilated area.	
Wear protective gloves/protective clothing/eye protection/face protection.	
If swallowed: Immediately call a poison center/doctor.	
Specific treatment (see on this label).	
Rinse mouth.	
IF INHALED: Remove person to fresh air and keep comfortable for breathing.	
IF exposed or concerned: Get medical advice/attention.	
Store in a well-ventilated place. Keep container tightly closed.	
Store locked up.	
Dispose of contents/container in accordance with local/regional/national/international regulation	<i>s</i> .
· Classification system:	
· NFPA ratings (scale 0 - 4)	
$4 0 Fire = 0 \\ Reactivity = 0$	
HMIS-ratings (scale 0 - 4)	
HEALTH *3 $Health = *3$	
FIRE 0 $Fire = 0$	
REACTIVITY \bigcirc Reactivity = 0	
• Other hazards	
· Results of PBT and vPvB assessment	
· PBT: Not applicable.	
· vPvB: Not applicable.	
3 Composition/information on ingredients	
Chamical observations Substances	
· Chemical characterization: Substances	
· CAS No. Description	
637-03-6 Phenylarsine Oxide, Technical Grade • Identification number(s)	
· Identification number(s)	

- EC number: 211-275-3
- · Index number: 033-002-00-5

4 First-aid measures

- · Description of first aid measures
- General information:

Immediately remove any clothing soiled by the product.

Remove breathing apparatus only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

• After inhalation:

Supply fresh air or oxygen; call for doctor. In case of unconsciousness place patient stably in side position for transportation.

(Contd. on page 3)

US

Printing date 04/13/2021

Reviewed on 04/13/2021

Trade name: Phenylarsine Oxide, Technical Grade

(Contd. of page 2)

- After skin contact: Immediately wash with water and soap and rinse thoroughly.
 After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: Do not induce vomiting; immediately call for medical help.
- Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

5 *Fire-fighting measures*

- · Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- *Methods and material for containment and cleaning up: Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.*
- · Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.
- · Protective Action Criteria for Chemicals
- · PAC-1: Substance is not listed.
- · PAC-2: Substance is not listed.
- · PAC-3: Substance is not listed.

7 Handling and storage

- · Handling:
- · Precautions for safe handling
- Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care.

- Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see item 7.

(Contd. on page 4)

US -

Printing date 04/13/2021

Reviewed on 04/13/2021

Trade name: Phenylarsine Oxide, Technical Grade

(Contd. of page 3)

· Control parameters

· Components with limit values that require monitoring at the workplace:

CAS: 637-03-6 Phenylarsine Oxide, Technical Grade

WEEL Skin

• Additional information: The lists that were valid during the creation were used as basis.

· Exposure controls

- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately.

• Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

• Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

Information on basic physical and chemical properties General Information				
Appearance:				
Form:	Powder			
Color:	Light yellow			
Odor:	Characteristic			
Odor threshold:	Not determined.			
pH-value:	Not applicable.			

Printing date 04/13/2021

Reviewed on 04/13/2021

Trade name: Phenylarsine Oxide, Technical Grade

		(Contd. of page 4
• Change in condition Melting point/Melting range: Boiling point/Boiling range:	144-148 °C (291.2-298.4 °F) Undetermined.	
· Flash point:	Not applicable.	
· Flammability (solid, gaseous):	Product is not flammable.	
• Decomposition temperature:	Not determined.	
· Auto igniting:	Not determined.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits: Lower: Upper:	Not determined. Not determined.	
· Vapor pressure:	Not applicable.	
· Density at 20 °C (68 °F): · Relative density · Vapor density · Evaporation rate	1 g/cm ³ (8.345 lbs/gal) Not determined. Not applicable. Not applicable.	
· Solubility in / Miscibility with Water:	Not determined.	
· Partition coefficient (n-octanol/wat	er): Not determined.	
· Viscosity: Dynamic: Kinematic:	Not applicable. Not applicable.	
• Other information	No further relevant information available.	

10 Stability and reactivity

- *Reactivity* No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- *Incompatible materials:* No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

• Acute toxicity:

· LD/LC50 values that are relevant for classification:

Oral LD50 100 mg/kg (ATE)

Inhalative LC50/4h 0.5 mg/l (ATE)

- · Primary irritant effect:
- \cdot on the skin: No irritant effect.
- \cdot on the eye: No irritating effect.

(Contd. on page 6)

US -

Printing date 04/13/2021

Reviewed on 04/13/2021

Trade name: Phenylarsine Oxide, Technical Grade

• Sensitization: No sensitizing effects known.

- Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer) Substance is not listed.
- · NTP (National Toxicology Program) Substance is not listed.
- · OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

12 Ecological information

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- *Mobility in soil* No further relevant information available.
- · Additional ecological information:

· General notes:

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground.

- Results of PBT and vPvB assessment
- *PBT:* Not applicable.
- vPvB: Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packagings:

• Recommendation: Disposal must be made according to official regulations.

· UN-Number	
DOT, IMDG, IATA	UN3465
· UN proper shipping name	
-DOT	Organoarsenic compound, solid, n.o.s. (Phenylarsine Oxide
	Technical Grade)
· IMDG, IATA	ORGANOARSENIC COMPOUND, SOLID, N.O.S. (Phenylarsin
	Oxide, Technical Grade)

(Contd. of page 5)

Printing date 04/13/2021

Reviewed on 04/13/2021

Trade name: Phenylarsine Oxide, Technical Grade

	(Contd. of page
· Transport hazard class(es)	
·DOT	
TOXIC	
· Class	6.1 Toxic substances
· Label	6.1
· IMDG, IATA	
6	
· Class	6.1 Toxic substances
· Label	6.1
· Packing group · DOT, IMDG, IATA	111
· Environmental hazards:	Environmentally hazardous substance, solid
• Marine pollutant:	No
· Special precautions for user	Warning: Toxic substances
• Hazard identification number (Kemler code).	
· EMS Number:	F-A,S-A
· Stowage Category	Α
• Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	UN 3465 ORGANOARSENIC COMPOUND, SOLID, N.O.S (PHENYLARSINE OXIDE, TECHNICAL GRADE), 6.1, III

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot Sara

- Section 355 (extremely hazardous substances): Substance is not listed.
- · Section 313 (Specific toxic chemical listings): Substance is listed.
- · TSCA (Toxic Substances Control Act): ACTIVE
- · Hazardous Air Pollutants Substance is not listed.
- · Proposition 65
- · Chemicals known to cause cancer: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for females: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- · Chemicals known to cause developmental toxicity: Substance is not listed.
- · Carcinogenic categories
- · EPA (Environmental Protection Agency) Substance is not listed.
- TLV (Threshold Limit Value) Substance is not listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.
- · GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 8)

Printing date 04/13/2021

Reviewed on 04/13/2021

Trade name: Phenylarsine Oxide, Technical Grade

(Contd. of page 7) · Hazard pictograms GHS06 GHS08 · Signal word Danger · Hazard statements Toxic if swallowed or if inhaled. May cause cancer. · Precautionary statements Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/spray Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. If swallowed: Immediately call a poison center/doctor. Specific treatment (see on this label). Rinse mouth. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF exposed or concerned: Get medical advice/attention. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations. · National regulations: · Information about limitation of use:

Workers are not allowed to be exposed to this hazardous material. Exceptions can be made by the authorities in certain cases.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Environment protection department.

- · Contact:
- · Date of preparation / last revision 04/13/2021 / -
- Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value

(Contd. on page 9)

Printing date 04/13/2021

Reviewed on 04/13/2021

Trade name: Phenylarsine Oxide, Technical Grade

PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Acute Tox. 3: Acute toxicity – Category 3 Carc. 1A: Carcinogenicity – Category 1A (Contd. of page 8)

US