

Safety Data Sheet according to OSHA HCS

Printing date 07/17/2021

Reviewed on 07/17/2021

1 Identification

- **Product name**
- **Trade name:** Tetraphenylarsonium chloride monohydrate, 99%
- **Item number:** 33-3050
- **CAS Number:**
104170-16-3
- **EC number:**
208-070-6
- **Index number:**
033-002-00-5
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Strem Chemicals, Inc.
7 Mulliken Way
NEWBURYPORT, MA 01950
USA
info@strem.com
- **Information department:** Technical Department
- **Emergency telephone number:**
EMERGENCY: CHEMTREC: + 1 (800) 424-9300
During normal opening times: +1 (978) 499-1600

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS06 Skull and crossbones

Acute Tox. 2 H300 Fatal if swallowed.

Acute Tox. 3 H331 Toxic if inhaled.

- **Label elements**

- **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS06

- **Signal word** Danger

- **Hazard-determining components of labeling:**

Tetraphenylarsoniumchlorid-Monohydrat

- **Hazard statements**

H300 Fatal if swallowed.

H331 Toxic if inhaled.

- **Precautionary statements**

P284 [In case of inadequate ventilation] wear respiratory protection.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P403+P233 *Store in a well-ventilated place. Keep container tightly closed.*
P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 4
Fire = 0
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = 3
Fire = 0
Reactivity = 0

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Substances**

- **CAS No. Description**

104170-16-3 Tetraphenylarsoniumchlorid-Monohydrat

- **Identification number(s)**

- **EC number:** 208-070-6

- **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.

- **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.

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- **Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

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6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Mount respiratory protective device.
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
- **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.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.

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· 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: A NIOSH approved respirator in accordance with 29 CFR 1910.134.****· 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: Safety glasses****9 Physical and chemical properties****· Information on basic physical and chemical properties****· General Information****· Appearance:****Form:** Powder**Color:** White**· Odor:** Odorless**· Odor threshold:** Not determined.**· pH-value:** Not applicable.**· Change in condition****Melting point/Melting range:** Undetermined.**Boiling point/Boiling range:** Undetermined.**· Flash point:** Not applicable.**· Flammability (solid, gaseous):** Not determined.**· Ignition temperature:****Decomposition temperature:** Not determined.**· Auto igniting:** Not determined.**· Danger of explosion:** Product does not present an explosion hazard.**· Explosion limits:****Lower:** Not determined.

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Upper:	Not determined.
. Vapor pressure:	Not applicable.
. Density:	Not determined.
. Relative density	Not determined.
. Vapor density	Not applicable.
. Evaporation rate	Not applicable.
. Solubility in / Miscibility with Water:	Insoluble.
. Partition coefficient (n-octanol/water):	Not determined.
. Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
. Solvent content:	
Organic solvents:	0.0 %
VOC content:	0.0 g/l / 0.00 lb/gl
. Solids content:	100.0 %
. 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:**
- . Primary irritant effect:**
- . on the skin:** No irritant effect.
- . on the eye:** No irritating effect.
- . 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.

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- **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:** Not known to be hazardous to water.
- **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.

14 Transport information

· UN-Number	
· DOT, IMDG, IATA	UN1557
· UN proper shipping name	
· DOT	Arsenic compounds, solid, n.o.s.
· IMDG, IATA	ARSENIC COMPOUND, SOLID, N.O.S.

- **Transport hazard class(es)**

- **DOT**



- **Class**
- **Label**

6.1 Toxic substances
6.1

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· IMDG**· Class
· Label**6
6.1**· IATA****· Class
· Label**6.1 Toxic substances
6.1**· Packing group****· DOT, IMDG, IATA**

II

· Environmental hazards:**· Marine pollutant:**

No

· Special precautions for user

Not applicable.

· EMS Number:

F-A,S-A

· Stowage Category

A

· Segregation Code

SG70 For arsenic sulphides, "separated from" acids

· Transport in bulk according to Annex II of**MARPOL73/78 and the IBC Code**

Not applicable.

· Transport/Additional information:**· DOT****· Quantity limitations**

On passenger aircraft/rail: 25 kg

On cargo aircraft only: 100 kg

· IMDG**· Limited quantities (LQ)**

.5kg

· Excepted quantities (EQ)

Code: E4

Maximum net quantity per inner packaging: 1 g

Maximum net quantity per outer packaging: 500 g

· UN "Model Regulation":

UN 1557 ARSENIC COMPOUNDS, SOLID, N.O.S., 6.1, II

15 Regulatory information**· Safety, health and environmental regulations/legislation specific for the substance or mixture****· Sara****· Section 355 (extremely hazardous substances):**

Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is listed.

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· TSCA (Toxic Substances Control Act):

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 established by ACGIH)

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).

· Hazard pictograms

GHS06

· Signal word Danger**· Hazard-determining components of labeling:**

Tetraphenylarsoniumchlorid-Monohydrat

· Hazard statements

H300 Fatal if swallowed.

H331 Toxic if inhaled.

· Precautionary statements

P284 [In case of inadequate ventilation] wear respiratory protection.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

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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:** Technical Department.

· **Contact:** Technical Director

· **Date of preparation / last revision** 07/17/2021 / -

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

VOC: Volatile Organic Compounds (USA, EU)

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

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Tox. 2: Acute toxicity – Category 2

Acute Tox. 3: Acute toxicity – Category 3

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