

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/29/2024

Reviewed on 05/29/2024

## 1 Identification

- **Product identifier**
- **Trade name:** Sodium Tetraphenyl Borate, Reagent ACS
- **Article number:** S3925
- **CAS Number:**  
143-66-8
- **EC number:**  
205-605-5
- **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 [shermann@aquasolutions.org](mailto:shermann@aquasolutions.org)
- **Emergency telephone number:**  
Chemtec: 800-424-9300  
Canutec: 613-996-6666



## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS06 Skull and crossbones

Acute Toxicity - Oral 3

H301 Toxic if swallowed.



GHS08 Health hazard

Specific Target Organ Toxicity - Single Exposure 2 H371 May cause damage to organs.



GHS07

Skin Irritation 2

H315 Causes skin irritation.

- **Label elements**

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

- **Hazard pictograms**



GHS06



GHS07



GHS08

- **Signal word** Danger

- **Hazard statements**

Toxic if swallowed.

Causes skin irritation.

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/29/2024

Reviewed on 05/29/2024

**Trade name: Sodium Tetraphenyl Borate, Reagent ACS**

(Contd. of page 1)

May cause damage to organs.

· **Precautionary statements**

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

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves.

If swallowed: Immediately call a poison center/doctor.

Specific treatment (see on this label).

Rinse mouth.

If on skin: Wash with plenty of water.

IF exposed or concerned: Call a poison center/doctor.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

Store locked up.

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 1

Reactivity = 1

· **HMIS-ratings (scale 0 - 4)**



Health = 2

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**

CAS: 143-66-8 Sodium Tetraphenyl Borate

· **Identification number(s)**

· **EC number:** 205-605-5

### 4 First-aid measures

· **Description of first aid measures**

· **General information:**

Immediately remove any clothing soiled by the product.

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

· **After inhalation:** 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.

(Contd. on page 3)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 05/29/2024

Reviewed on 05/29/2024

**Trade name: Sodium Tetraphenyl Borate, Reagent ACS**

(Contd. of page 2)

- **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:** No special measures required.

### 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 section 13.
- **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:** 0.86 mg/m<sup>3</sup>
- **PAC-2:** 9.5 mg/m<sup>3</sup>
- **PAC-3:** 57 mg/m<sup>3</sup>

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Thorough dedusting.
- **Information about protection against explosions and fires:** No special measures required.
- **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:** None.
- **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 section 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.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/29/2024

Reviewed on 05/29/2024

**Trade name: Sodium Tetraphenyl Borate, Reagent ACS**

(Contd. of page 3)

Wash hands before breaks and at the end of work.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

· **Breathing equipment:** Not required.

· **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:** Not required.

· **Body protection:** Protective work clothing

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

**Form:** Solid

**Color:** Whitish

· **Odor:** No Data Available

· **Odor threshold:** Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

**Melting point/Melting range:** >300 °C (>572 °F)

**Boiling point/Boiling range:** Undetermined.

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Product is not flammable.

· **Decomposition temperature:** Not determined.

· **Ignition temperature:** Not determined.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

**Lower:** Not determined.

**Upper:** Not determined.

· **Vapor pressure:** Not applicable.

· **Density at 20 °C (68 °F):** 0.64 g/cm<sup>3</sup> (5.3408 lbs/gal)

· **Relative density** Not determined.

· **Vapor density** Not applicable.

(Contd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/29/2024

Reviewed on 05/29/2024

**Trade name: Sodium Tetraphenyl Borate, Reagent ACS**

(Contd. of page 4)

- |   |  |
|---|--|
| · <b>Evaporation rate</b>                         | Not applicable.                            |
| · <b>Solubility in / Miscibility with Water:</b>  | Not determined.                            |
| · <b>Partition coefficient (n-octanol/water):</b> | Not determined.                            |
| · <b>Viscosity:</b>                               |  |
| <b>Dynamic:</b>                                   | Not applicable.                            |
| <b>Kinematic:</b>                                 | Not applicable.                            |
| · <b>Other information</b>                        | 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)
------	------	-----------------

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **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.
- **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 2 (Self-assessment): hazardous for water
- Do not allow product to reach ground water, water course or sewage system.

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/29/2024

Reviewed on 05/29/2024

**Trade name: Sodium Tetraphenyl Borate, Reagent ACS**

(Contd. of page 5)

- *Danger to drinking water if even 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.

## 14 Transport information

- |  |  |
|--|--|
| <b>· UN-Number</b>   |  |
| <b>· DOT, IMDG, IATA</b>   | UN2811   |
| <b>· UN proper shipping name</b>   |  |
| <b>· DOT</b>   | Toxic solids, organic, n.o.s. (Sodium Tetraphenyl Borate)  |
| <b>· IMDG, IATA</b>  | TOXIC SOLID, ORGANIC, N.O.S. (Sodium Tetraphenyl Borate)   |
| <b>· Transport hazard class(es)</b>  |  |
| <b>· DOT</b>   |  |
|  | A diamond-shaped pictogram with a skull and crossbones, the word "TOXIC" below it, and the number "6" at the bottom. |
| <b>· Class</b>   | 6.1 Toxic substances   |
| <b>· Label</b>   | 6.1  |
|  |  |
| <b>· IMDG, IATA</b>  |  |
|  | A diamond-shaped pictogram with a skull and crossbones, the word "TOXIC" below it, and the number "6" at the bottom. |
| <b>· Class</b>   | 6.1 Toxic substances   |
| <b>· Label</b>   | 6.1  |
| <b>· Packing group</b>   |  |
| <b>· DOT, IMDG, IATA</b>   | III  |
| <b>· Environmental hazards:</b>  | Not applicable.  |
| <b>· Special precautions for user</b>  | Warning: Toxic substances  |
| <b>· Hazard identification number (Kemler code):</b>                             | 60   |
| <b>· EMS Number:</b>   | F-A,S-A  |
| <b>· Stowage Category</b>  | A  |
| <b>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.  |

(Contd. on page 7)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/29/2024

Reviewed on 05/29/2024

**Trade name: Sodium Tetraphenyl Borate, Reagent ACS**

(Contd. of page 6)

· **Transport/Additional information:**

· **DOT**

· **Quantity limitations**

On passenger aircraft/rail: 100 kg

On cargo aircraft only: 200 kg

· **IMDG**

· **Limited quantities (LQ)**

5 kg

· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

· **UN "Model Regulation":**

UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (SODIUM TETRAPHENYL BORATE), 6.1, III

## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

No further relevant information available.

· **Sara**

· **Section 355 (extremely hazardous substances):** Substance is not listed.

· **Section 313 (Specific toxic chemical listings):** Substance is not 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) I (oral)**

· **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).

· **Hazard pictograms**



GHS06



GHS07



GHS08

· **Signal word** Danger

· **Hazard statements**

Toxic if swallowed.

Causes skin irritation.

May cause damage to organs.

· **Precautionary statements**

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

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves.

If swallowed: Immediately call a poison center/doctor.

Specific treatment (see on this label).

(Contd. on page 8)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/29/2024

Reviewed on 05/29/2024

**Trade name: Sodium Tetraphenyl Borate, Reagent ACS**

(Contd. of page 7)

Rinse mouth.

If on skin: Wash with plenty of water.

IF exposed or concerned: Call a poison center/doctor.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

Store locked up.

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

· **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:

· **Date of preparation / last revision**

Revision 1.2, 05/28/2024: Reviewed SDS for accuracy. MH/STN

Revision 0.0 10-04-2016: Creation date for SDS. STN

05/29/2024

· **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

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Toxicity - Oral 3: Acute toxicity – Category 3

Skin Irritation 2: Skin corrosion/irritation – Category 2

Specific Target Organ Toxicity - Single Exposure 2: Specific target organ toxicity (single exposure) – Category 2

· **\* Data compared to the previous version altered.**