

SAFETY DATA SHEETS

According to the UN GHS revision 8

Version: 1.0

Creation Date: July 15, 2019

Revision Date: July 15, 2019



YATAI CHEMICAL CORP

1. SECTION 1: Identification

1.1. GHS Product identifier

Product name Tetrasodium pyrophosphate

1.2. Other means of identification

Other names Tetrasodium pyrophosphate; Sodium pyrophosphate, anhydrous, tech.;

1.3. Recommended use of the chemical and restrictions on use

Identified uses Industrial and scientific research uses.

Uses advised against no data available

1.4. Supplier's details

Company Yatai Chemical Corp
Address Room 20A5, No.585, Longhua West Road, Shanghai, China

Telephone 0086-21-64563115

1.5. Emergency phone number

Emergency phone number 0086-21-64563115

Service hours Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

2. SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Acute toxicity - Category 4, Oral

Serious eye damage, Category 1

2.2. GHS label elements, including precautionary statements

Pictogram(s)



Signal word Danger

Hazard statement(s) H302 Harmful if swallowed H318 Causes serious eye damage

Precautionary statement(s)

Prevention P264 Wash ... thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/protective

| | |
|-----------------|--|
| Response | clothing/eye protection/face protection/hearing protection/... P301+P317 IF SWALLOWED: Get medical help.P330 Rinse mouth.P305+P354+P338 IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.P317 Get medical help. |
| Storage | none |
| Disposal | P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. |

2.3. Other hazards which do not result in classification
no data available

3. SECTION 3: Composition/information on ingredients

3.1. Substances

| Chemical name | Common names and synonyms | CAS number | EC number | Concentration |
|---------------------------|----------------------------------|-------------------|------------------|----------------------|
| Tetrasodium pyrophosphate | Tetrasodium pyrophosphate | 7722-88-5 | 231-767-1 | 100% |

4. SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

Medical attention is required. Consult a doctor. Show this safety data sheet (SDS) to the doctor in attendance.

If inhaled

Fresh air, rest. Refer for medical attention.

Following skin contact

Remove contaminated clothes. Rinse and then wash skin with water and soap.

Following eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

Following ingestion

Rinse mouth. Refer for medical attention .

4.2. Most important symptoms/effects, acute and delayed

no data available

4.3. Indication of immediate medical attention and special treatment needed, if necessary

no data available

5. SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Use dry chemical, carbon dioxide or alcohol-resistant foam.

5.2. Specific hazards arising from the chemical

Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.

5.3. Special protective actions for fire-fighters

In case of fire in the surroundings, use appropriate extinguishing media.

6. SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting. Wash away remainder with plenty of water. Personal protection: particulate filter respirator adapted to the airborne concentration of the substance.

6.2. Environmental precautions

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

6.3. Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

7. SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

7.2. Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

8. SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure limit values

| | | | | |
|------------------|----------------------------------|-------------------------|---------------------------------|-------------------------|
| Component | Tetrasodium pyrophosphate | | | |
| CAS No. | 7722-88-5 | | | |
| | Limit value - Eight hours | | Limit value - Short term | |
| | ppm | mg/m³ | ppm | mg/m³ |
| Australia | | 5 | | |

| | | | | |
|-------------------------|----------------|---------------------|--|----------------------|
| Austria | | 5 inhalable aerosol | | 10 inhalable aerosol |
| Belgium | | 5 | | |
| Canada - Ontario | | 5 | | |
| Canada - Québec | | 5 | | |
| Denmark | | 5 | | 10 |
| France | | 5 | | |
| Ireland | | 5 | | |
| New Zealand | | 5 | | |
| Singapore | | 5 | | |
| South Korea | | 5 | | |
| Switzerland | | 5 inhalable aerosol | | |
| USA - NIOSH | | 5 | | |
| United Kingdom | | 5 | | |
| | Remarks | | | |

Biological limit values

no data available

8.2. Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear safety spectacles.

Skin protection

Protective gloves.

Respiratory protection

Use ventilation (not if powder).

Thermal hazards

no data available

9. SECTION 9: Physical and chemical properties and safety characteristics

| | |
|---|-------------------|
| Physical state | Solid. Powder. |
| Colour | White. |
| Odour | no data available |
| Melting point/freezing point | 880 °C. |
| Boiling point or initial boiling point and boiling range | 93.8°C |

| | |
|---|---|
| Flammability | no data available |
| Lower and upper explosion limit/flammability limit | no data available |
| Flash point | no data available |
| Auto-ignition temperature | no data available |
| Decomposition temperature | no data available |
| pH | no data available |
| Kinematic viscosity | no data available |
| Solubility | In water: 58.5 g/L. Temperature:20 °C. pH:9.9. Remarks:For effect of temperature and pH, see conclusion. |
| Partition coefficient n-octanol/water | no data available |
| Vapour pressure | no data available |
| Density and/or relative density | 2.62. Temperature:21 °C. |
| Relative vapour density | no data available |
| Particle characteristics | no data available |

10. SECTION 10: Stability and reactivity

10.1. Reactivity

no data available

10.2. Chemical stability

no data available

10.3. Possibility of hazardous reactions

Decomposes on burning. The solution in water is a weak base.

10.4. Conditions to avoid

no data available

10.5. Incompatible materials

no data available

10.6. Hazardous decomposition products

no data available

11. SECTION 11: Toxicological information

Acute toxicity

- Oral: no data available
- Inhalation: no data available
- Dermal: LD50 - rabbit (male/female) - > 2 000 mg/kg bw.

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT-single exposure

The substance is irritating to the eyes, skin and respiratory tract.

STOT-repeated exposure

no data available

Aspiration hazard

Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly, especially if powdered.

12. SECTION 12: Ecological information

12.1. Toxicity

- Toxicity to fish: LC50 - *Oncorhynchus mykiss* (previous name: *Salmo gairdneri*) - > 100 mg/L - 96 h. Remarks:Potassium.
- Toxicity to daphnia and other aquatic invertebrates: EC50 - *Daphnia magna* - > 100 mg/L - 48 h. Remarks:Based on test material purity of 100%.
- Toxicity to algae: EC50 - *Desmodesmus subspicatus* (previous name: *Scenedesmus subspicatus*) - > 100 mg/L - 72 h.
- Toxicity to microorganisms: EC50 - activated sludge of a predominantly domestic sewage - > 1 000 mg/L - 3 h. Remarks:Respiration rate.

12.2. Persistence and degradability

no data available

12.3. Bioaccumulative potential

no data available

12.4. Mobility in soil

no data available

12.5. Other adverse effects

no data available

13. SECTION 13: Disposal considerations

13.1. Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14. SECTION 14: Transport information

14.1. UN Number

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

14.2. UN Proper Shipping Name

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

14.3. Transport hazard class(es)

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

14.4. Packing group, if applicable

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

14.5. Environmental hazards

ADR/RID: No

IMDG: No

IATA: No

14.6. Special precautions for user

no data available

14.7. Transport in bulk according to IMO instruments

no data available

15. SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

| Chemical name | Common names and synonyms | CAS number | EC number |
|--|---------------------------|------------|-----------|
| Tetrasodium pyrophosphate | Tetrasodium pyrophosphate | 7722-88-5 | 231-767-1 |
| European Inventory of Existing Commercial Chemical Substances (EINECS) | | | Listed. |
| EC Inventory | | | Listed. |
| United States Toxic Substances Control Act (TSCA) Inventory | | | Listed. |

| | |
|--|-------------|
| China Catalog of Hazardous chemicals 2015 | Not Listed. |
| New Zealand Inventory of Chemicals (NZIoC) | Listed. |
| Philippines Inventory of Chemicals and Chemical Substances (PICCS) | Listed. |
| Vietnam National Chemical Inventory | Listed. |
| Chinese Chemical Inventory of Existing Chemical Substances (China IECS) | Listed. |
| Korea Existing Chemicals List (KECL) | Listed. |

16. SECTION 16: Other information

Information on revision

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Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

References

- IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>
- HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>
- IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en
- CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>
- ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>
- ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>
- Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>
- ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

Other Information

Other melting points: 880°C (powder).

Any questions regarding this SDS, Please send your inquiry to ydcl@yataichemical.com

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.