

## Safety Data Sheet: PTSA

### 1. Identification

|                   |                                                                                                                                                                                                                                                                       |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product           | PTSA; CAS 59572-10-0; EC 626-424-1                                                                                                                                                                                                                                    |
| Use               | Industrial tracer evaluation and analytical development.                                                                                                                                                                                                              |
| Company           | Hainan Zhongxin Chemical Co., Ltd. (ZXCHEM)                                                                                                                                                                                                                           |
| Address           | Room 1001, Building A, Caohejing Center, No. 1520 Gumei Road, Xuhui District, Shanghai, China                                                                                                                                                                         |
| Telephone / email | +86-21-54265599 / sales@zxchem.com.cn                                                                                                                                                                                                                                 |
| Emergency contact | ZXCHEM office number above, office hours, China time (UTC+8). For urgent medical assistance contact local emergency services.                                                                                                                                         |
| Scope             | Reference safety information for PTSA. The reference composition, concentration and supply-grade differences are described in Section 3. This document does not certify the composition or transport status of a specific delivered batch or a different formulation. |

### 2. Hazards Identification

|                       |                                                                                                                                                                                                         |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Classification        | Skin irritation Category 2; eye irritation Category 2; specific target organ toxicity, single exposure Category 3 (respiratory irritation).                                                             |
| Signal word / symbols | Warning; GHS07                                                                                                                                                                                          |
| Hazard statements     | H315: skin irritation. H319: serious eye irritation. H335: possible respiratory irritation.                                                                                                             |
| Prevention            | Use adequate ventilation; avoid inhaling dust. Prevent skin and eye contact. Wear suitable chemical-resistant gloves and eye protection. Wash after handling; keep food and drink out of the work area. |
| Response              | After exposure, stop work and seek medical advice. For severe exposure obtain urgent medical care. Rinse contaminated skin or eyes with water; move an inhalation casualty to fresh air.                |
| Environment           | Prevent uncontrolled release to drains, soil or surface water. Collect spills for appropriate disposal.                                                                                                 |



### 3. Composition / Information on Ingredients

|                      |                                                                                                                                                                                                                 |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reference ingredient | Tetrasodium pyrene-1,3,6,8-tetrasulfonate, CAS 59572-10-0. The source identifies a substance but does not assign an exact composition percentage or hydration content.                                          |
| Supply grade         | ≥98% (HPLC)                                                                                                                                                                                                     |
| Applicability        | The cited concentration or purity describes the reference material. It is not a certificate of analysis for the delivered batch; different solvents or dilutions require the matching supplier safety document. |

#### 4. First-Aid Measures

|                            |                                                                                                                                                              |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General</b>             | Protect the rescuer from exposure and show the product information to medical personnel. Obtain medical advice if symptoms occur or exposure is significant. |
| <b>Inhalation</b>          | Move to fresh air and keep the person comfortable. Seek medical care for breathing difficulty or persistent symptoms. Avoid exposing rescuers to dust.       |
| <b>Skin</b>                | Remove contaminated clothing and rinse skin thoroughly with water. Seek medical advice for persistent irritation.                                            |
| <b>Eyes</b>                | Rinse gently with clean water for at least 15 minutes. Remove contact lenses when easy and continue rinsing. Seek medical advice if irritation persists.     |
| <b>Ingestion</b>           | Rinse the mouth. Do not induce vomiting. Give nothing by mouth to an unconscious person. Obtain medical advice.                                              |
| <b>Effects / treatment</b> | Powder can irritate skin, eyes and breathing passages. Avoid ingestion and airborne dust. Treatment is symptomatic and directed by a clinician.              |

#### 5. Fire-Fighting Measures

|                            |                                                                                                                                                    |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Extinguishing media</b> | Use water spray, foam, dry chemical or carbon dioxide suited to the surrounding fire.                                                              |
| <b>Hazards</b>             | Heating can release irritating sulfur-containing and carbon-oxide fumes.                                                                           |
| <b>Protection</b>          | Firefighters require suitable protective clothing and self-contained breathing equipment. Prevent contaminated firefighting water entering drains. |

#### 6. Accidental Release Measures

|                    |                                                                                                                                    |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personnel</b>   | Isolate the spill and provide ventilation. Use chemical-resistant gloves and eye protection; avoid contact and dust exposure.      |
| <b>Environment</b> | Contain the release and protect drains and waterways. Report significant environmental contamination to the responsible authority. |
| <b>Cleanup</b>     | Collect spilled solid without raising dust into closed labelled containers.                                                        |

#### 7. Handling and Storage

|                          |                                                                                                                                                                            |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Handling</b>          | Use controlled transfer and effective ventilation. Avoid generating dust and prevent contamination of the work area.                                                       |
| <b>Storage</b>           | Keep sealed in a cool, dry, ventilated area away from strong oxidizing agents. Protect from moisture, direct sunlight and contamination; reseal promptly after dispensing. |
| <b>Incompatibilities</b> | Strong oxidizing agents and incompatible contaminants.                                                                                                                     |
| <b>Specific use</b>      | Evaluate compatibility and appropriate operating conditions in the complete formulation before industrial use.                                                             |

#### 8. Exposure Controls / Personal Protection

|                               |                                                                                                                                                    |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Exposure limits</b>        | The reference does not establish a product-specific exposure limit. Apply local workplace exposure requirements and control dust or mist.          |
| <b>Engineering controls</b>   | Use local extraction where dust can be generated. Maintain accessible eyewash and emergency washing facilities.                                    |
| <b>Personal protection</b>    | Wear chemical-resistant gloves selected for the task, suitable protective clothing and splash goggles. Add face protection for splash-prone tasks. |
| <b>Respiratory protection</b> | Use a properly selected respirator under a respiratory-protection program where engineering controls do not adequately limit airborne exposure.    |
| <b>Hygiene</b>                | Wash after handling, remove contaminated clothing promptly and do not eat, drink or smoke in the work area.                                        |

## 9. Physical and Chemical Properties

|                                     |                                                                                                                                                                                                   |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Appearance                          | Light yellow to yellow-green powder                                                                                                                                                               |
| Formula / molecular weight          | C16H6Na4O12S4 / 610.43 g/mol (anhydrous basis)                                                                                                                                                    |
| Physical form, supply specification | Powder                                                                                                                                                                                            |
| Anhydrous formula                   | C16H6Na4O12S4                                                                                                                                                                                     |
| Anhydrous molecular weight          | 610.43 g/mol                                                                                                                                                                                      |
| Water content, supply specification | ≤0.5%                                                                                                                                                                                             |
| Other properties                    | Product-specific values for odor threshold, vapor pressure, partition coefficient, autoignition temperature and viscosity are not supplied by the selected reference set. No values are inferred. |

## 10. Stability and Reactivity

|                   |                                                                                                   |
|-------------------|---------------------------------------------------------------------------------------------------|
| Stability         | Handle and store under the recommended conditions. Prevent contamination and unnecessary heating. |
| Incompatibilities | Strong oxidizing agents and incompatible contaminants.                                            |
| Decomposition     | Heating can release irritating sulfur-containing and carbon-oxide fumes.                          |

## 11. Toxicological Information

|                          |                                                                                                                                                                        |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Exposure effects         | Powder can irritate skin, eyes and breathing passages. Avoid ingestion and airborne dust.                                                                              |
| Reference classification | Skin irritation Category 2; eye irritation Category 2; specific target organ toxicity, single exposure Category 3 (respiratory irritation).                            |
| Toxicological data       | The selected reference identifies irritation hazards without complete numerical toxicity studies. No absence of systemic, reproductive or chronic effects is inferred. |

## 12. Ecological Information

|                       |                                                                                                                                                                           |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Environmental effects | The reference does not provide complete quantitative aquatic, persistence or bioaccumulation studies. Prevent uncontrolled release and dispose of residues appropriately. |
| Controls              | Prevent uncontrolled release, collect spills and dispose of contaminated material through an authorized route.                                                            |
| Assessment            | No product-specific PBT/vPvB assessment is claimed. Absence of data does not establish absence of environmental effects.                                                  |

## 13. Disposal Considerations

|           |                                                                                                                                                          |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product   | Collect surplus product and contaminated cleanup material for disposal by an authorized chemical-waste contractor in accordance with local requirements. |
| Packaging | Containers may retain product residues. Do not reuse contaminated packaging without an approved cleaning process; use an authorized disposal route.      |

## 14. Transport Information

|                       |                                                                                                                                                         |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Classification        | Non-dangerous goods                                                                                                                                     |
| UN number             | Not regulated                                                                                                                                           |
| Shipping name         | Non-dangerous goods                                                                                                                                     |
| Class / packing group | ADR / IMDG / IATA: non-dangerous goods.                                                                                                                 |
| Transport precautions | Protect packaging and closures from damage, secure loads and prevent releases. This reference is not a shipping declaration for a specific consignment. |

**15. Regulatory Information**

|                     |                                                                                                                                                                         |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Identity</b>     | PTSA; CAS 59572-10-0; EC 626-424-1                                                                                                                                      |
| <b>HS reference</b> | 290410; reference heading rather than a destination customs ruling.                                                                                                     |
| <b>Compliance</b>   | Apply applicable workplace, environmental and transport rules. A raw-material listing does not establish authorization for a finished disinfectant or biocidal product. |
| <b>Assessment</b>   | No ZXCHEM-specific chemical safety assessment or destination registration is asserted.                                                                                  |

**16. Other Information**

|                        |                                                                                                                                                                                                                                  |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Hazard meanings</b> | H315: skin irritation. H319: serious eye irritation. H335: possible respiratory irritation.                                                                                                                                      |
| <b>Limitations</b>     | Prepared as reference safety information for the identified material. It is not a batch analytical certificate or safety assessment of a different solvent-containing formulation.                                               |
| <b>Revision</b>        | 2026.2; prepared 2026-10-06. Customer-document branding and title corrected; technical safety data retained.                                                                                                                     |
| <b>Document scope</b>  | Reference safety information for the material and grade described in Sections 1 and 3. Different concentrations, solvents or formulations require the applicable safety information. This is not a batch analytical certificate. |

Revision: 2026.2 | Revision date: 2026-10-06