

Safety Data Sheet: Stannous Sulfate

1. Identification

Product	Stannous Sulfate; CAS 7488-55-3; EC 231-302-2
Use	Professional tin electroplating, surface colouring and chemical processing.
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 Stannous Sulfate. 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	Corrosive to metals Category 1; acute inhalation toxicity Category 4; skin irritation Category 2; eye irritation Category 2A; skin sensitization Category 1; suspected germ-cell mutagenicity Category 2; suspected reproductive toxicity Category 2; respiratory target-organ effects Category 3; repeated-exposure target-organ toxicity Category 2; chronic aquatic toxicity Category 1.
Signal word / symbols	Warning; GHS05, GHS07, GHS08, GHS09
Hazard statements	H290: corrosive effects on metals. H332: harmful by inhalation. H315/H319: skin and eye irritation. H317: allergic skin reaction. H341/H361: suspected genetic and reproductive effects. H335: respiratory irritation. H373: organ effects from prolonged or repeated exposure. H410: severe lasting aquatic toxicity.
Prevention	Use effective local exhaust ventilation and avoid airborne dust. Wear chemical-resistant gloves, splash goggles and protective clothing. Use suitable particulate respiratory protection where exposure assessment requires it; keep eyewash and washing facilities accessible.
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	Tin(II) sulfate, CAS 7488-55-3, EC 231-302-2; supply assay ≥99.0%. The selected acidic substance reference includes a small residual sulfuric-acid fraction, CAS 7664-93-9, reported at 0.1–1% in its regulatory information. This reference fraction is not asserted as the ZXCHEM supplied-batch recipe.
Supply grade	Assay ≥99.0%
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

General	Protect the rescuer from exposure and show the product information to medical personnel. Obtain medical advice if symptoms occur or exposure is significant.
Inhalation	Move to fresh air and keep the person comfortable. Seek medical care for breathing difficulty or persistent symptoms. Avoid exposing rescuers to dust.
Skin	Remove contaminated clothing and rinse skin thoroughly with water. Seek medical advice for persistent irritation.
Eyes	Rinse gently with clean water for at least 15 minutes. Remove contact lenses when easy and continue rinsing. Seek medical advice if irritation persists.
Ingestion	Rinse the mouth. Do not induce vomiting. Give nothing by mouth to an unconscious person. Obtain medical advice.
Effects / treatment	Harmful inhalation, skin and eye irritation, and allergic skin reactions are possible. Repeated exposure can affect the cardiovascular system. Suspected genetic and reproductive effects require exposure prevention. Treatment is symptomatic and directed by a clinician.

5. Fire-Fighting Measures

Extinguishing media	Select extinguishing media suitable for the surrounding fire. Firefighters require self-contained respiratory protection and protective clothing; retain contaminated firewater.
Hazards	Non-combustible inorganic material. Heating or surrounding fire can release sulfur oxides and tin oxides; reference decomposition temperature approximately 378°C.
Protection	Firefighters require suitable protective clothing and self-contained breathing equipment. Prevent contaminated firefighting water entering drains.

6. Accidental Release Measures

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

7. Handling and Storage

Handling	Use effective local exhaust ventilation and avoid airborne dust. Wear chemical-resistant gloves, splash goggles and protective clothing. Use suitable particulate respiratory protection where exposure assessment requires it; keep eyewash and washing facilities accessible.
Storage	Store tightly closed, dry and under controlled access in a cool, ventilated area. Use corrosion-resistant non-metal containers or compatible protective liners. Protect from moisture and strong oxidizing agents.
Incompatibilities	Strong oxidizing agents; moisture and unprotected metal containers.

8. Exposure Controls / Personal Protection

Exposure limits	Selected reference occupational limits for inorganic tin compounds: 2 mg/m ³ as tin, time-weighted average. Apply the relevant local limit and effective dust control; select respiratory protection through exposure assessment.
Engineering controls	Use local extraction where dust can be generated. Maintain accessible eyewash and emergency washing facilities.
Personal protection	Wear chemical-resistant gloves selected for the task, suitable protective clothing and splash goggles. Add face protection for splash-prone tasks.
Respiratory protection	Use a properly selected respirator under a respiratory-protection program where engineering controls do not adequately limit airborne exposure.
Hygiene	Wash after handling, remove contaminated clothing promptly and do not eat, drink or smoke in the work area.

9. Physical and Chemical Properties

Appearance	White crystals or crystalline powder
Formula / molecular weight	SnSO ₄ / 214.77 g/mol
Physical state	White crystalline powder
Formula	SnSO ₄
Molecular weight	214.77 g/mol
Water solubility, reference	188 g/L at 20°C
Thermal decomposition, reference	Approximately 378°C
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; moisture and unprotected metal containers.
Decomposition	Non-combustible inorganic material. Heating or surrounding fire can release sulfur oxides and tin oxides; reference decomposition temperature approximately 378°C.

11. Toxicological Information

Exposure effects	Harmful inhalation, skin and eye irritation, and allergic skin reactions are possible. Repeated exposure can affect the cardiovascular system. Suspected genetic and reproductive effects require exposure prevention.
Reference classification	Corrosive to metals Category 1; acute inhalation toxicity Category 4; skin irritation Category 2; eye irritation Category 2A; skin sensitization Category 1; suspected germ-cell mutagenicity Category 2; suspected reproductive toxicity Category 2; respiratory target-organ effects Category 3; repeated-exposure target-organ toxicity Category 2; chronic aquatic toxicity Category 1.
Data limits	Reference oral rat LD ₅₀ 2,207 mg/kg and inhalation acute-toxicity estimate 1.52 mg/L for 4-hour dust/mist exposure. In-vitro mutagenic findings and suspected developmental effects are reported. Cardiovascular effects are identified for prolonged or repeated exposure; these reference endpoints are not batch test results.

12. Ecological Information

Environmental effects	The selected reference classifies severe long-lasting aquatic toxicity and potential accumulation in aquatic organisms. Some ecotoxicity endpoints use read-across from tin(II) chloride; no numerical read-across value is represented as a direct supplied-product test. Prevent all uncontrolled releases.
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	Class 8 — Corrosive
UN number	UN 3260
Shipping name	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
Class / packing group	Selected same-CAS acidic solid reference: DOT / IMDG / IATA Class 8, packing group III, UN 3260. Marine pollutant under IMDG. The reference includes residual sulfuric acid; the actual consignment composition and acidity govern the shipping declaration.
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

Identity	Stannous Sulfate; CAS 7488-55-3; EC 231-302-2
HS reference	283329; reference heading rather than a destination customs ruling.
Compliance	Apply applicable workplace, environmental and transport rules. A raw-material listing does not establish authorization for a finished formulation.
Assessment	No ZXCHEM-specific chemical safety assessment or destination registration is asserted.

16. Other Information

Hazard meanings	H290: corrosive effects on metals. H332: harmful by inhalation. H315/H319: skin and eye irritation. H317: allergic skin reaction. H341/H361: suspected genetic and reproductive effects. H335: respiratory irritation. H373: organ effects from prolonged or repeated exposure. H410: severe lasting aquatic toxicity.
Limitations	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.
Revision	2026.1; prepared 2026-10-07. Customer-document branding and title corrected; technical safety data retained.
Document scope	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.

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