

Safety Data Sheet: Zinc Borate 2335

1. Identification

Product	Zinc Borate 2335; CAS 138265-88-0; EC 235-804-2
Use	Industrial polymer additive and formulation 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 Zinc Borate 2335. 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	Reproductive toxicity Category 2; acute aquatic toxicity Category 1; chronic aquatic toxicity Category 2.
Signal word / symbols	Warning; GHS08, GHS09
Hazard statements	H361d: suspected of harming the unborn child. H400: very toxic to aquatic life. H411: toxic to aquatic life with lasting effects.
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	Hydrated zinc borate, CAS 138265-88-0. The reference substance is >98.8%; local ZnO, B2O3 and bound-water ranges are supply limits, not batch analysis.
Supply grade	ZnO 37–40% / B2O3 47–49%
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	Control dust exposure, especially for workers requiring reproductive-hazard protection. Treatment is symptomatic and directed by a clinician.

5. Fire-Fighting Measures

Extinguishing media	Use water spray, foam, dry chemical or carbon dioxide suited to the surrounding fire.
Hazards	No specific hazardous decomposition product is assigned for this inorganic solid.
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 enclosed powder feeding or local extraction. Wear suitable protective gloves, eye protection and work clothing; avoid dust inhalation and direct contact. Provide controls for fumes during hot processing.
Storage	Keep sealed in a cool, dry, ventilated warehouse. Protect from moisture, heat and contamination; store away from incompatible chemicals.
Incompatibilities	Strong reducing agents; acidic or alkaline contamination can change borate chemistry.

8. Exposure Controls / Personal Protection

Exposure limits	The reference manufacturer applies an internal limit of 1 mg B/m ³ when a national limit is absent. This is a manufacturer recommendation, not a universal legal OEL.
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 powder
Formula / molecular weight	2ZnO·3B2O3·3.5H2O / 434.66 g/mol
Appearance	White powder
Hydrate identity	2ZnO·3B2O3·3.5H2O
Molecular weight, hydrate	434.66 g/mol
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 reducing agents; acidic or alkaline contamination can change borate chemistry.
Decomposition	No specific hazardous decomposition product is assigned for this inorganic solid.

11. Toxicological Information

Exposure effects	Control dust exposure, especially for workers requiring reproductive-hazard protection.
Reference classification	Reproductive toxicity Category 2; acute aquatic toxicity Category 1; chronic aquatic toxicity Category 2.
Toxicological data	The matched reference assigns suspected developmental toxicity. Its other numerical toxicology findings are not used to certify the supplied grade.

12. Ecological Information

Environmental effects	The selected reference identifies acute and chronic aquatic hazards. Keep borate powder and cleanup residues out of drainage and water.
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 9 — Environmentally hazardous solid
UN number	UN 3077
Shipping name	Environmentally hazardous substance, solid, n.o.s. (zinc borate)
Class / packing group	ADR/RID, IMDG and IATA: UN 3077, Class 9, packing group III; marine pollutant in the matched hydrated-solid reference.
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	Zinc Borate 2335; CAS 138265-88-0; EC 235-804-2
HS reference	284020; reference heading rather than a destination customs ruling.
Compliance	Apply applicable workplace, environmental and transport rules. A raw-material listing does not establish finished-product authorization.
Assessment	No ZXCHEM-specific chemical safety assessment or destination registration is asserted.

16. Other Information

Hazard meanings	H361d: suspected of harming the unborn child. H400: very toxic to aquatic life. H411: toxic to aquatic life with lasting effects.
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	2026.2; prepared 2026-10-06. 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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