

## Safety Data Sheet: Aspartame

### 1. Identification

|                          |                                                                                                                                                                                                                                                                            |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product</b>           | Aspartame; CAS 22839-47-0; EC 245-261-3                                                                                                                                                                                                                                    |
| <b>Use</b>               | Professional sweetener formulation development.                                                                                                                                                                                                                            |
| <b>Company</b>           | Hainan Zhongxin Chemical Co., Ltd. (ZXCHEM)                                                                                                                                                                                                                                |
| <b>Address</b>           | Room 1001, Building A, Caohejing Center, No. 1520 Gumei Road, Xuhui District, Shanghai, China                                                                                                                                                                              |
| <b>Telephone / email</b> | +86-21-54265599 / sales@zxchem.com.cn                                                                                                                                                                                                                                      |
| <b>Emergency contact</b> | ZXCHEM office number above, office hours, China time (UTC+8). For urgent medical assistance contact local emergency services.                                                                                                                                              |
| <b>Scope</b>             | Reference safety information for Aspartame. 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

|                              |                                                                                                                                                                                                         |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Classification</b>        | Not classified as hazardous under the selected OSHA / WHMIS substance reference.                                                                                                                        |
| <b>Signal word / symbols</b> | No signal word assigned; No GHS pictogram in the selected reference                                                                                                                                     |
| <b>Hazard statements</b>     | No classified GHS hazard statements assigned in the selected reference. Control airborne dust and unnecessary exposure.                                                                                 |
| <b>Prevention</b>            | 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. |
| <b>Response</b>              | 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.                |
| <b>Environment</b>           | Prevent uncontrolled release to drains, soil or surface water. Collect spills for appropriate disposal.                                                                                                 |

### 3. Composition / Information on Ingredients

|                             |                                                                                                                                                                                                                 |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reference ingredient</b> | Aspartame, CAS 22839-47-0, EC 245-261-3. Matched substance reference range 80–100%; supply assay 98.0–102.0% is an analytical specification, not an invented composition percentage.                            |
| <b>Supply grade</b>         | Assay 98.0–102.0%                                                                                                                                                                                               |
| <b>Applicability</b>        | 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> | No specific acute symptoms are identified by the selected reference. Avoid ingestion, dust exposure and unnecessary skin or eye contact. 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>             | No substance-specific decomposition products are reported in the selected reference. Avoid unnecessary heating and exposure to fire.               |
| <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>           | Store tightly closed in a cool, dry, well-ventilated place. Protect from moisture, excessive heat, direct sunlight and incompatible chemicals.     |
| <b>Incompatibilities</b> | No substance-specific incompatibility is identified in the selected reference. Prevent contamination and apply the recommended storage conditions. |
| <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>        | No OSHA, ACGIH or NIOSH ingredient-specific exposure limit is established in the selected reference; control dust under local workplace requirements. |
| <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

|                                   |                                                                                                                                                                                                   |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Appearance</b>                 | White, odourless crystalline granules                                                                                                                                                             |
| <b>Formula / molecular weight</b> | C14H18N2O5 / 294.30 g/mol                                                                                                                                                                         |
| <b>Physical state</b>             | Solid                                                                                                                                                                                             |
| <b>Melting range, reference</b>   | 248–250°C                                                                                                                                                                                         |
| <b>pH, supply TDS</b>             | 4.50–6.00 in 0.8% w/v water                                                                                                                                                                       |
| <b>Other properties</b>           | 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

|                          |                                                                                                                                                    |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Stability</b>         | Handle and store under the recommended conditions. Prevent contamination and unnecessary heating.                                                  |
| <b>Incompatibilities</b> | No substance-specific incompatibility is identified in the selected reference. Prevent contamination and apply the recommended storage conditions. |
| <b>Decomposition</b>     | No substance-specific decomposition products are reported in the selected reference. Avoid unnecessary heating and exposure to fire.               |

## 11. Toxicological Information

|                                 |                                                                                                                                                                                                                      |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Exposure effects</b>         | No specific acute symptoms are identified by the selected reference. Avoid ingestion, dust exposure and unnecessary skin or eye contact.                                                                             |
| <b>Reference classification</b> | Not classified as hazardous under the selected OSHA / WHMIS substance reference.                                                                                                                                     |
| <b>Data limits</b>              | The reference gives no numerical acute toxicity endpoints. It notes the IARC Group 2B listing for aspartame; this listing is distinct from the selected OSHA hazard classification and does not set food-use limits. |

## 12. Ecological Information

|                              |                                                                                                                                                        |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Environmental effects</b> | The selected reference provides no quantitative aquatic toxicity, biodegradation, mobility or bioaccumulation endpoints. Prevent uncontrolled release. |
| <b>Controls</b>              | Prevent uncontrolled release, collect spills and dispose of contaminated material through an authorized route.                                         |
| <b>Assessment</b>            | No product-specific PBT/vPvB assessment is claimed. Absence of data does not establish absence of environmental effects.                               |

## 13. Disposal Considerations

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

**14. Transport Information**

|                              |                                                                                                                                                         |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Classification</b>        | Non-dangerous goods                                                                                                                                     |
| <b>UN number</b>             | Not assigned                                                                                                                                            |
| <b>Shipping name</b>         | Not regulated as dangerous goods                                                                                                                        |
| <b>Class / packing group</b> | DOT / IMDG / IATA: non-dangerous goods for the matched solid reference; no packing group assigned.                                                      |
| <b>Transport precautions</b> | 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>     | Aspartame; CAS 22839-47-0; EC 245-261-3                                                                                                                                   |
| <b>HS reference</b> | 292429; 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 food, flavour or other formulation. |
| <b>Assessment</b>   | No ZXCHEM-specific chemical safety assessment or destination registration is asserted.                                                                                    |

**16. Other Information**

|                        |                                                                                                                                                                                                                                  |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Hazard meanings</b> | No classified GHS hazard statements assigned in the selected reference. Control airborne dust and unnecessary exposure.                                                                                                          |
| <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>        | 2026.1; 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: 2026.1 | Revision date: 2026-10-06