



Vitasweet Co.,Ltd.  
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## Certificate of Analysis

**Product Name** Vitasweet® Aspartame  
**Synonyms** Aspartame, Aspartyl Phenylalanine Methyl Ester, APM  
**Definition** Chemical name: N-L- $\alpha$ -Aspartyl-L-Phenylalanine-1-Methyl Ester  
 C.A.S. number: 22839-47-0  
 Chemical formula:  $C_{14}H_{18}N_2O_5$  Molecular weight: 294.31  
**Description** Odorless, sweet and white graininess  
**Functional Use** High potency-low caloric sweetener

**Tests and Methods** FCC, EP, USP

**Batch Number:** 2306061G      **Batch Size:** 2000KG      **Date of Production:** JUN.16, 2023

| Test item   | Requirement                          | Result           |
|---|--------------------------------------|------------------|
| Appearance  | White crystalline powder or Granular | White granular   |
| Appearance of solution  | Conform to EP                        | Conform          |
| Identification  | Meet the requirements                | Conform          |
| Assay(105°C, 4h)  | 98.0% ~ 102.0%                       | 98.81%           |
| Loss on drying  | ≤ 4.5%                               | 2.07%            |
| Residue on ignition( Sulphate Ash)                                  | ≤ 0.2%                               | 0.06%            |
| Conductivity  | ≤ 30 $\mu$ s/cm                      | 15.09 $\mu$ s/cm |
| PH  | 4.5 ~ 6.0                            | 5.21             |
| Specific rotation   | +14.5° ~ + 16.5°                     | +15.03°          |
| Transmittance   | ≥95%                                 | 99.20%           |
| L-phenylalanine(C)  | ≤ 0.5%                               | Not found        |
| Diketopiperazine(A)<br>(5-benzyl-3,6-dioxo-2-Piperazineacetic acid) | ≤1.5%                                | 0.04%            |
| Other related substances  | ≤1.5%                                | 0.68%            |
| Heavy metals (as Pb)  | ≤ 10ppm                              | <5ppm            |
| Lead  | ≤ 1ppm                               | <1ppm            |
| Arsenic   | ≤ 3ppm                               | <2ppm            |
| <b>Conclusion:</b> Meets the requirements of <u>FCC, EP, USP</u>    |                                      |                  |

Date of Test: JUN.17, 2023

Date of Expiry: JUN.15, 2026

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