

Aspartame Powder

DESCRIPTION

Aspartame is N-L-alpha-Aspartyl-L-phenylalanine-1-methyl ester. It is a white, crystalline powder or granular material that has a sweet taste. It is sparingly soluble in water and slightly soluble in alcohol. The pH of a 0.8% solution is between 4.5 and 6.0. SinoSweet® Aspartame has a clean, sweet taste that is approximately 180 to 200 times sweeter than sugar.

Formula: $C_{14}H_{18}N_2O_5$

CAS: 22839-47-0

Molecular Weight: 294.31

E Number: E951

EINECS Number: 245-261-3

Flashpoint: Not Applicable

SUGGESTED USES

Beverage, Dry Powder Mixes, Tabletops, Chewable Vitamins, Pharmaceuticals

Test Item	Specification	Test Method / Reference
Appearance	White Powder	Visual
Odor/Taste	Conforms to Quality Standards	Internal Method
Identification	Meets Requirements	Current FCC / USP/NF / JECFA / EP
Assay (on dry basis)	98.0% to 102%	Current FCC / USP/NF / JECFA / EP
Loss on Drying	≤ 4.5%	Current FCC / USP/NF / JECFA / EP
Residue on Ignition / Sulphated Ash	≤ 0.2%	Current FCC / USP/NF / JECFA / EP
Optical(Specific) Rotation	+14.5° and +16.5°	Current FCC / USP/NF / JECFA / EP
*Conductivity	≤ 30 μ Scm-1	EP
Transmittance	≥ 95%	Current USP/NF / JECFA
Extraneous Matter	Free From Material Foreign to Product	Free From Visual Evidence
pH (0.8% Solution)	4.5 ~6.0	Current FCC/JECFA
Heavy Metal (as Pb)	≤ 10 ppm	Current USP/NF / JP / EP
Lead	≤ 1 ppm	Current FCC / JECFA
Arsenic	≤ 3 ppm	Current FCC
Residual Solvents	Meets Requirements	Current USP/NF
5-benzyl-3,6-dioxo-2-Piperazineacetic Acid (DKP)	≤ 1.5%	Current USP / NF / FCC / JECFA
Other Related Substances	≤ 2.0% USP/NF; ≤ 1.5% EP	Current USP/NF
L-phenylalanine	≤ 0.5%	Current EP
Solubility	Completely Dissolves	Internal Method
Particle Size	On 100 Mesh ≤ 5.0%	Internal Method
Bulk Density	0.3± 0.1 g/mL	Internal Method
Total Aerobic Plate Count	≤ 250 CFU/g	GB
Yeast and Mold Count	≤ 100 CFU/g	GB
Coliforms	≤ 3.0 MPN/g	GB
Escherichia Coli	Negative/g	GB
Salmonella	Negative/25g	GB

FCC = Food Chemical Codex

USP/NF - United States Pharmacopeia-National Formulary

GB= China National Standard Method

JP = Japanese Pharmacopeia

EP = European Pharmacopeia

CFU = Colony Forming Units

JECFA = Joint FAO/WHO Expert Committee on Food Additives

MPN = Most Probable Number

* Capable of manufacturing EP grade Aspartame, please discuss with your sales representative on your requirements.



Aspartame Powder

CONFORMITY WITH

FAO-WHO Specifications
Food Chemicals Codex
European Commission Regulation No. 231/2012
Japanese Standards for Food Additives
US Pharmacopoeia
This material is Kosher Pareve and Halal Certified

PACKAGING

25 kg net weight fiber drums with inner liner or as otherwise agreed upon.

SHIPPING & HANDLING

Recommended to be stored in an odor-free environment. Low humidity conditions are recommended to minimize caking/degradation potentials.

STORAGE

Aspartame should be stored in a cool, dry ambient environment. Avoid high heat.

SHELF LIFE

The shelf life of this material is 5 years from the date of manufacture if stored in ambient room temperature conditions. Product should be reevaluated if it exceeds expiration date.

LOT CODE EXPLANATION

Example Lot: W21010101
W = Plant Code
21 = Year of Manufactured: 2021
01 = Month Manufactured: January
01 = Day (1st day of month)
01 = Batch No. #01

NUTRITIONAL DATA

Nutrient	Per 100 grams
Water(g)	4.5
Protein(g)*	95.3
L-Phenylalanine(g)	53.5
All Fats(g)	0
Ash(g)	<0.2
Calories(kcal)	381
Carbohydrates(g)	0
Sugar(g)	0
Dietary Fiber(g)	0
Cholesterol (mg)	0
Calcium(mg)	<2
Iron(mg)	<2
Potassium(mg)	<10
Sodium(mg)	≤30
Vitamins	0

This data is calculated from standard analytical data.
The zero values are based on process knowledge and raw materials used.
*Aspartame is a protein and is digested and metabolized like a simple protein.

