



Specification

Concerning Product:	
Article number	22839470BPEUJLV
Trade name / designation / denomination	Aspartame Powder, EP, USP, JP, FCC
CAS number	22839-47-0
Other names / synonyms	•3-amino-4-[(1-methoxy-1-oxo-3-phenylpropan-2-yl)amino]-4-oxobutanoic acid; •3-amino-N-(?-carbomethoxy-phenethyl)-succinamic acid-N-methyl ester; •3-amino-N-(α-carbomethoxy-phenethyl)-succinamic acid-N-methyl ester; •N-L-?Aspartyl-L-Phenylalanine-1-methyl ester; (3S)-3-Amino-4-[[[(2S)-1-methoxy-1-oxo-3-phenylpropan-2-yl]amino]-4-oxobutanoic acid; •N-L-αAspartyl-L-Phenylalanine-1-methyl ester; (3S)-3-Amino-4-[[[(2S)-1-methoxy-1-oxo-3-phenylpropan-2-yl]amino]-4-oxobutanoic acid; •aspartame;
EC number	245-261-3
Customs tariff number / CN code / TARIC	29242998
Molecular weight [g / mol]	294.30312
Formula	C ₁₄ H ₁₈ N ₂ O ₅

Parameter	Test Method	Specification	Unit
Organoleptic test			
Appearance of solution	EP	clear and ≤ GY6	
Appearance		Food additive, Aspartame is a Non-Nutritive artificial Sweetener based on two amino acids. It is metabolized like a food protein. Aspartame is a white or almost white odourless crystalline powder having a sweet taste, slightly hygroscopic, approximately 200 times as sweet as sucrose. Aspartame provides a clean sugar-like sweetness without any bitter or metallic aftertaste.	
Physical parameter			
Conductivity	EP	≤ 30	μS/cm
Loss on drying	FCC/JSFA /EU/JECFA	≤ 4,5	%
pH value	FCC/JSFA /EU/JECFA	4,5 – 6,0	
Specific Optical Rotation	FCC/JSFA /EU/JECFA	14,5 – 16,5	°
Bulk density	HS	0,15 – 0,30	g/ml
Solubility		in ethanol: slightly soluble	
Solubility		in water: sparingly or slightly soluble	
Transmittance	EU/JECFA	≥ 95,0	%
Identity			
Assay	FCC	HPLC: 98,0 – 102,0	%
Assay	JSFA/EU /JECFA	Titration: 98,0 – 102,0	%
Infrared absorption spectrometry	FCC/JSFA	conforms with standard	
Impurities			
Residue on ignition	FCC/JSFA	≤ 0,2	%
Heavy Metals (as Pb)	EP	≤ 10	mg/kg
Impurity	EP	A. (5-benzyl-3,6-dioxo-2-piperazineacetic acid): ≤ 1,5	%
Impurity	EP	L-Phenylalanine: ≤ 0,5	%
Impurity	HS	other optical isomers: ≤ 0,02	%
Related substances	EP	≤ 1,5	%
Related substances	USP	≤ 2,0	%
Residual Solvents			

Residual solvents	HS	meets requirements	
Elemental Impurities			
Arsenic (As)	EP	≤ 3	mg/kg
Lead (Pb)	HS	≤ 1	mg/kg
Nutritional data			
Ash (Nutrient)		≤ 0,2	g/100g
Calories		382 1600	kcal kJ
Calcium (Nutrient)		≤ 2	mg/100g
Carbohydrates		≤ 0	g/100g
Cholesterol		≤ 0	mg/100g
All Fats		≤ 0	g/100g
Iron (Nutrient)		≤ 2	mg/100g
Dietary Fiber		≤ 0	g/100g
Potassium (Nutrient)		≤ 10	mg/100g
Sodium (Nutrient)		≤ 30	mg/100g
L-Phenylalanine		≥ 56	g/100g
Protein		≥ 95,3	g/100g
Vitamins (Nutrient)		≤ 0	mg/100g
Water (Nutrient)		≤ 4,5	g/100g
Microbiological data			
Aerobic microorganisms	HS	≤ 250	CFU/g
Coliform bacteria	HS	≤ 10	CFU/g
Escherichia Coli.	HS	Negative	
Salmonella	EXT LAB	Negative	
Yeast and Mould	HS	≤ 100	CFU/g
Particle size distribution			
Particles	HS	< 100 mesh: ≤ 1	%

Annotation:

HS = in House Standard

Supplemental information:

Shelf life: 5 years

Note: NUTRITIONAL INFO:

Aspartame is chemically pure and contains no hazardous substances, additives, preservatives, colors or flavors. Aspartame is metabolized in the body and consequently has the above mentioned nutritive values.

Aspartame is a dipeptide, which is digested and metabolized like a protein.

Phenylalanine is an essential amino acid; required intake for adults: > 1 g/day

Storage conditions: At ambient room condition in a cool and dry place (recommendation: below 30°C and 35 to 75 % relative humidity), when properly preserved in well-closed original container. Product should be reevaluated after this period. Do not store near products with a strong odor.

Complies with monographie: Joint FAO/WHO Expert Committee on Food Additives specifications;
Food Chemicals Codex;
EU Commission Regulation 231/2012;
Japanese Standards for Food Additives

Packing: Standard packaging: 25 kg recyclable corrugated cardboard box with double inner polyethylene liner sacks and safety cable tie, 12 boxes on 2 levels per Euro pallet, boxes are designed to be stacked no more than 2 pallets high. Further packaging units are possible, e.g. 5kg cardboard box and 1kg polyethylene jars.

Regional origin: EU

Chemische Werke Hommel GmbH & Co.KG

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Waltrop, 26. Jun. 2020

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