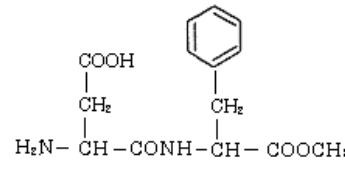


Specification Sheet Aspartame¹

Product Name	Aspartame
Synonyms	Aspartyl Phenylalanine Methyl Ester, APM
Product Code	APM – 100 (Powder) – 101(Granules) – 102 (High Density Powder) – 103 (Fine Granules)
Definition	<p>Chemical name N-L-α-Aspartyl-L-Phenylalanine-1-Methyl Ester</p> <p>C.A.S. number 22839-47-0</p> <p>E number E 951</p> <p>Chemical formula $C_{14}H_{18}O_5N_2$</p> <p>Molecular Weight 294.31</p>
Description	<div style="text-align: center;">  </div> <p>Appearance A white, odorless, crystalline powder.</p> <p>Taste Intense sweet taste – approx. 180 times sweeter than sucrose.</p> <p>Solubility in Water Sparingly Soluble. Approximately 1% at 20°C</p> <p>Solubility in Ethanol Slightly Soluble.</p>
Identification	<p>Identification by IR IR spectrum matches standard</p>
Purity	<p>Assay Not less than 98.0% and not more than 102.0% after drying</p> <p>Loss on Drying Not more than 4.5%</p> <p>Optical (Specific) Rotation Between +14.5° and +16.5° calculated on dry basis</p> <p>Transmittance Not less than 95.0%</p> <p>Residue on Ignition Not more than 0.2%</p> <p>Diketopiperazine² Not more than 1.5%</p> <p>Other Related Substances Not more than 2% USP/NF. Not more than 1.5% EP</p> <p>L-α-aspartyl-L-phenylalanine Not more than 0.25%</p> <p>L-phenylalanine Not more than 0.5%</p> <p>Heavy Metals (as Lead) Not more than 10 mg/kg</p> <p>Lead Not more than 1mg/kg</p> <p>Arsenic Not more than 3mg/kg</p> <p>Conductivity Not more than 30μs/cm</p> <p>pH Not less than 4.5 and not more than 6.0</p> <p>Organic Volatile Impurities Conforms to USP</p> <p>Appearance of Solution Conforms to EP</p>
Statement	This product meets the current specifications of the United States Pharmacopoeia/ National Formulary (USP/NF) and the European Pharmacopoeia (EP) as well as the Joint FAO/WHO Expert Committee of Food Additives (JECFA) and the Food Chemical Codex (FCC).
Disclaimer	The information contained on this sheet is intended to provide guidance on our products and should not be construed as a guarantee. In some countries regulatory restrictions for the use of this product exist and must be observed.

¹ Manufactured in China for The Ingredient House, LLC, USA

² 5-Benzyl-3,6-dioxo-2-piperazineacetic acid

Product:	Aspartame	Doc Name:	APM Specification 06-10		
Doc Effective Date:	6/30/10	Doc Revision:	1	Doc Expiration Date:	6/1/12
Date Printed:	7/9/10	Time:	11:24 AM	Page:	1 of 1