

Product Information

**82514 Protein Hydrolysate Amicase (Amicase, Case amino acids, Casein acid hydrolysate)**

An acidic hydrolysate from Casein used as a nutrient mixture in different media for a variety of bacteria, including but not limited to: *B. subtilis*, *Enterobacter aerogenes*, *E. coli*, *Saccharomyces cerevisiae*, *Staph. aureus*, *Strep. pyogenes*, and *Strep. griseus*.

**Product Description:**

CAS number: 91079-40-2  
 Amino N/Total N: ~0.3  
 total nitrogen: ~13%  
 water: ~5%  
 ash: <5%  
 solubility (2% in water): yellow, clear  
 pH (2% in water): 6-7

Because of the extent of hydrolysis, the product is (on anhydrous basis) 18-20% peptides and 80-82% amino acids; Amicase has an average molecular weight of 220, distributed as 67% 100-200 daltons, 32% 200-500 daltons and 1% 500-1000 daltons. 2

**Typical values (no specifications):**

Potassium 0.01%	Magnesium 0.02%
Calcium 0.20%	Chloride 0.5%
Sodium 0.90%	Sulfate 0.5%
free amino acids 71.0%	Phosphate 0.10%

**Typical amino acid distribution (no specifications): [mg/g]**

Alanine 55.7	Isoleucine 46.9
Threonine 34.6	Arginine 35.7
Leucine 75.6	Tryptophan <0.5
Aspartic acid 50.1	Lysine 90.1
Tyrosine 28.8	Cysteine 0.2
Methionine 22.0	Valine 64.3
Glutamic acid 187.5	Phenylalanine 41.3
Glycine 21.3	Proline 83.5
Histidine 28.4	Serine 24.6

Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C. Solutions that are sterile-filtered should be stable at 2-8°C for months.

Cultural characteristics on blood agar.

Organisms (ATCC)	colony size [mm]	hemolytic zone [mm]
<i>Strep. pneumoniae</i> (6305)	0.3	3.0
<i>Strep. pyogenes Type A</i> (19615)	0.1	1.8
<i>Strep. pyogenes Type C</i> (9342)	0.3	3.0
<i>Enterococcus faecalis Type D</i> (12958)	0.6	1.3

References:

1. Sigma-Aldrich quality control
2. Supplier information