

## Product Datasheet

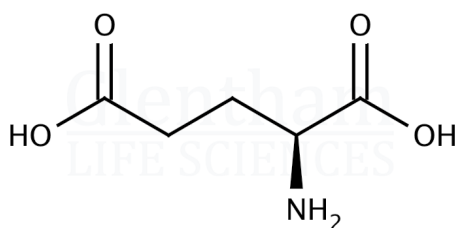
### GM3277 - L-Glutamic acid

#### Product Details

Product Name	L-Glutamic acid
Glenthams Code	GM3277
CAS Number	56-86-0
EINECS	200-293-7
MDL-Nummer	MFCD00002634
PubChem SID	310274214
Related Categories	Amino Acids, Biochemicals, Raw Materials (IVD), Reagents for Cell Culture

#### Structure

Molecular Weight	: 147.13
Molecular Formula	: C <sub>5</sub> H <sub>9</sub> NO <sub>4</sub>



Physical Description	: White to almost white crystalline powder
Identification (IR)	: To conform to standard
Solubility (10% in 2M HCl)	: Clear, colourless solution
Transmittance	: ≥ 98.0%
Specific Optical Rotation ([α] <sub>20/D</sub> )	: +31.5 - +32.4 ° (c=10, 2M HCl)
pH	: 3.0 - 3.5
Heavy Metals (as Pb)	: ≤ 10ppm
Arsenic (As)	: ≤ 1ppm
Iron (Fe)	: ≤ 10ppm
Ammonium (NH <sub>4</sub> )	: ≤ 0.02%
Sulphate (SO <sub>4</sub> )	: ≤ 0.02%
Chloride (Cl)	: ≤ 0.02%
Other Amino Acids	: None detected
Any Individual Impurity (TLC)	: ≤ 0.5%
Total Impurities (TLC)	: ≤ 2.0%
Residue on Ignition	: ≤ 0.1%
Loss on Drying	: ≤ 0.1% (105°C, 3h)
Assay (Titration)	: 99.0 - 101.0 % (dried basis)
Pharmacopoeia Specification(s)	: USP, AJI
Version	: v1.2

#### Storage

Recommended storage temperature: +20°C.

#### Hazards and Transport

Not classified as hazardous under CLP.  
Not classified as dangerous for transport.

#### Glenthams Product Specification

#### About L-Glutamic acid

Glutamic acid is a non-essential amino acid. It is one of the most abundant amino acids and has key functions in multiple metabolic pathways. Glutamate, the anionic form of glutamic acid, is an excitatory neurotransmitter and precursor to GABA. Glutamic acid is also an important constituent in cell culture media.

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