

TECHNICAL INFORMATION

Typical Amino Acid Composition of GELITA Collagen Peptides (Hydrolysate)*

	g/100 g**
ALANINE	8.6
ARGININE	7.3
ASPARTIC ACID	5.8
GLUTAMIC ACID	10.2
GLYCINE	22.1
HISTIDINE	1.0
HYDROXYPROLINE	11.9
ISOLEUCINE	1.4
LEUCINE	2.7
METHIONINE	0.9
PHENYLALANINE	2.1
PROLINE	12.6
SERINE	3.2
THREONINE	1.8
LYSINE	3.6
HYDROXYLYSINE	1.6
TYROSINE	0.8
VALINE	2.4

* Including the following branded products: Fortigel[®], Verisol[®], Fortibone[®], Petagile[®], Tendoforte[®], Peptiplus[®], Bodybalance[®]

** g amino acid per 100 g crude protein (equal to % weight)

Method

The amino acid composition was determined by amino acid analysis as described in Pharm. Eu. 2.2.56 (Version 8).

The proteins were hydrolysed for 24 h to their individual amino acid constituents in the presence of 6 n HCl and 0.1 % phenol at 110 °C. The amide links in the side chains of glutamine and asparagine are hydrolyzed to form glutamic acid and aspartic acid.

Following the hydrolysis, the amino acids are covalently labelled with 6 – aminoquinolyl-N-hydroxysuccinimidyl carbamate (AQC; AccQ-Flour reagent, Waters Inc.) using a pre-column derivatisation technique. L-2 Aminobutyric acid (AAbA) with a final concentration of 10 pmol/μl was used as internal standard. The derivatives are separated by C₁₈ reversed-phase HPLC and quantified by fluorescence detection. (Determination of data PROTAGEN AG, Dortmund, Germany).