

Technical Data Sheet			Rev.:	Den_2022_02	
ε -polylysine:					
Potency:	50% to ≥ 95%				
Molecular formula:	$(C_6H_{12}N_2O)_n$				
Molecular weight:	3888-4300 g/mol				
Description:	ε-Polylysine is an ideal natural antimicrobial to prolong the shelf life, with a high natural antimicrobial activity against a wide range of fungi, Gram-positive and Gram-negative bacteria, and their spores. ε-Polylysine is a homopolymer that consists of 25-35 L-lysine residues. It's produced by a fermentation process using Streptomyces albulus under aerobic conditions. Consumers become more health conscious, and there is an increasing demand for natural preservatives. ε-Polylysine is now gaining some attention for the food industry due to its unique properties including heat stability and excellent antimicrobial activity. ε-Polylysine is food grade and meets FAO/WHO specifications. It is certified as GRAS (Generally Recognized As Safe) by the US FDA with US GRAS No.: GRN000135. Currently, ε-Polylysine has approval as a food additive in China, Korea, Japan, USA and some more countries.				
Applications:	Gram-negative bacteria, yeast, moulds, viruses etc. It's been widely used in the food manufacturing. ε-Polylysine can be completely digested and absorbed by the human body and broken down into essential amino acids lysine without any side effect.				
The direction of use and quantities:	Contact Biozymes Denmark				
CAS Number:	28211-04-3				
Color:	Light yellow powder				
E number:	None				
Chemical Specification:	Lead (Pb)		≤2 ppm	≤2 ppm	
	Arsenic (As)		≤ 3 ppm	≤ 3 ppm	
	Mercury (Hg)		Max 1mg/kg	Max 1mg/kg	
	Copper (Cu)		Max 50mg/k	Max 50mg/kg	
	Zink (Z)		Max 25mg/k	Max 25mg/kg	
Microbial Specifications:	Total plate count		< 10cfu/g	< 10cfu/g	
	E- coli form bacteria		≤ 30 MPN/1	≤ 30 MPN/100g	
	Salmonella		Absent / 25g	Absent / 25g	
Storage:	Cold dry place keept sealed with no direct sunlight				
Packaging size:	As Per customer Specifications		Form: Doyba	Form: Doybags with zip	
Shelf life:	Day of production		24 months	24 months	
Country of origin:	Denmark	Contacts:	Info@biozyme		