

Application of e Polylysine

- With features of solubility in water,
Good Heat Tolerance and;
Extensive Antimicrobial against fungi,
e- Polylysine can be used under various conditions.
See the effects of temp. and pH on the activity of e-Polylysine as
under: (Table 1 and Table 2)

Table- 1

Effect of Temp. on the Activity of e Polylysine

Temp. & Duration	MIC (mg/Ltr)
Untreated (Room Temp.)	50
80°C, for 60 minutes	50
100 °C, for 30 min	50
120 °C, for 20 min	50

MIC = Minimum Inhibition Concentration

Table- 2

Effect of pH on the Activity of e Polylysine

Bacteria for Test	MIC (mg/Ltr)			
	pH =5.0	pH =6.0	pH =7.0	pH =8.0
Bacillus Subtilis	3.0	3.0	3.0	3.0
Bacillus Cereus	25.0	100.0	50.0	12.5
Escherichia coli	25.0	25.0	50.0	50.0
Staphylococcus aureus	12.5	25.0	12.5	< 6.3

- e-Polylysine was generally recognized as a safe food preservative by FDA in October, 2003.
- It is widely used in food preservation.
- In food application, it is usually applied with alcohol, organic acids, or glyceride, etc..
- It can be used in
 - Cooked rice,
 - Cakes,
 - Snacks,
 - Noodles,
 - Drinks,
 - Brewing,
 - Meat products,
 - Canned food, etc.
- e Polylysine is dissolved in cold boiled water or distilled water to 5-10% , then put it into the food according to the recommended dosage and mix fully. If it is used together with other food preservatives, it will can affect better.
- No Influence on Food Flavor