

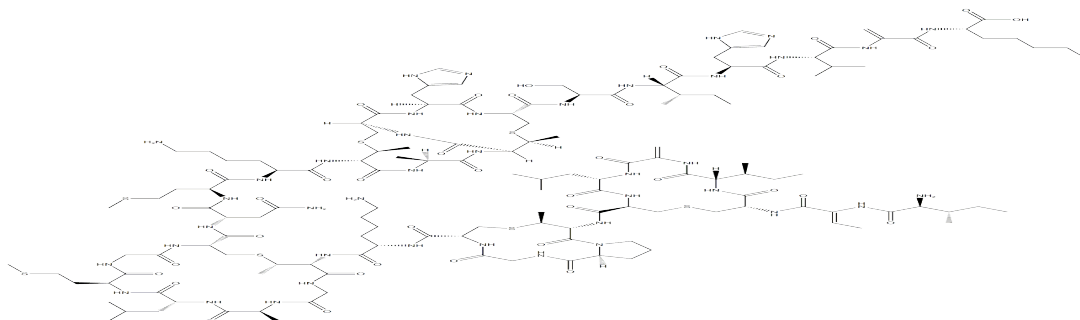
## ■ Nisin

### Introduction

Nisin is a polycyclic antibacterial peptide produced by the bacterium *Lactococcus lactis* that is used as a food preservative. It has 34 amino acid residues, including the uncommon amino acids lanthionine (Lan), methyllanthionine (MeLan), didehydroalanine (Dha), and didehydroaminobutyric acid (Dhb). These unusual amino acids are introduced by posttranslational modification of the precursor peptide. In these reactions a ribosomally synthesized 57-mer is converted to the final peptide. The unsaturated amino acids originate from serine and threonine, and the enzyme-catalysed addition of cysteine residues to the didehydro amino acids result in the multiple (5) thioether bridges. Subtilin and epidermin are related to nisin. All are members of a class of molecules known as lantibiotics. In the food industry, nisin is obtained from the culturing of *L. lactis* on natural substrates, such as milk or dextrose, and it is not chemically synthesized.

### Ingredient

Chemical Name	Nisin
CAS	1414-45-5
MF	C143H228N42O37S7
MW	3354.0705
MS	



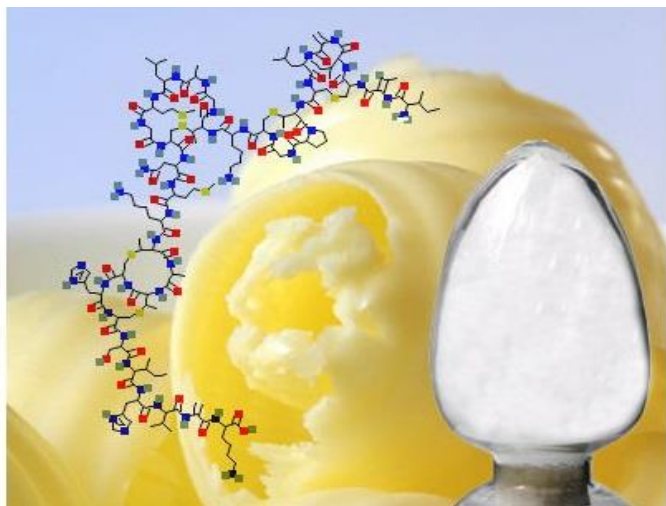
### Item and Standard

ITEM	UNIT	STANDARD
Appearance		White or faint yellow powder
Potency	IU/mg	≥1000
Loss on Drying	%	≤3%
Arsenic	%	≤ 0.0003%

Heavy Metals (as Pb)	%	≤ 0.002%
Sodium Chloride	%	≥50%

## Application

- ▶ Yogurt Drinks
- ▶ Vegetable protein food
- ▶ Canned food
- ▶ Meat Product
- ▶ Condiment
- ▶ Beverages



## Packaging

25kg

## Storage

Please reading safety data sheet before carrying or using the product.  
Cool and dry, keep tightly closed, quality guarantee period is two years.