



TECHNICAL DATA SHEET

NISIN, MIN 1000IU/MG

Introduction: Nisin is used to control bacterial spoilage in both heat processed and low pH foods. Nisin is a natural polypeptide antibacterial produced by strains of *Lactococcus lactis* subsp *lactis*. Nisin is effective against a wide range of Gram-positive bacteria and is particularly effective against the heat resistant spores produced by Gram-positive *Bacillus* and *Clostridium* spp. Nisin has no effect against Gram-negative bacteria, yeasts or moulds.

Nisin is manufactured from the fermentation of a milk-based medium by *Lactococcus lactis* subsp. *lactis*. The nisin from this fermentation is concentrated, dried and standardized with sodium chloride to produce Nisin, which has a known and consistent level of nisin activity.

Nisin is soluble in aqueous environments and is most stable to heat in acidic conditions. At typical usage levels, Nisin does not affect the colour or flavour of the finished product.

Specification: Meet the GB1886.231-2016 and FAO / WHO standards

Appearance	Grayish white powder	Aerobic Plate Count	≤10 CFU/g
Loss on drying	≤3.0%	Coliform bacteria	≤3.0 MPN/g
pH	3.1-3.6	Salmonella	Negative in 25g
Potency	≥1000IU/mg	Escherichia coli	≤3.0MPN/g
Sodium chloride	≥50%	Arsenic (As)	≤1 ppm
Heavy metals (as Pb)	≤10 ppm	Mercury (Hg)	≤1 ppm
Lead (Pb)	≤1 ppm		

Applications: Nisin is effective in a variety of food products across a wide range of pH levels (3.5-8.0), including: Dairy products like cheese products, cream products, dairy and fat based desserts, yoghurt, recombined and flavored milks; Fruit & vegetable preparations including pulp, pasteurized fruit juices, plant protein based beverages, coconut water; whisps and snacks; Pasteurized liquid egg products; Low pH sauces and toppings including mayonnaise and salad dressings; Pasteurized soups and sauces; Canned vegetables, Processed meats; Hot plate flour products e.g. crumpets; Fermentation processes and fermentation products such as beer.

Composition: contains 2.5% nisin (E234) blend with sodium chloride (as carrier).

Packaging: 500g HDPE bottle, 25KG/drum.

Shelf life and storage: 2 years when stored in a cool, dry place without direct sunlight and temperature below 25°C.