

サンザイム

**Sanzyme Biologics**

Fermentation & Biotechnology Since 1969

## PIONEERS IN FERMENTATION TECHNOLOGY

### Bacillus clausii- SNZ 1971

**Strain Deposition :** MTCC 5980

**Strain Description :**

Has been used safely as probiotic strain. It is ubiquitously present, including the human gut.

It exists as spores which are resistant to adverse physical and chemical conditions

A widely used, well documented, safe and stable spore forming bacteria that promotes gastrointestinal health.

#### Physical features

- High tolerance to Acid, Sugar and Salinity
- High thermal stability
- Good preservation in foods
- Stability in formulations
- Good dispersion
- Does not require cold chain
- Shelf stable for 2 years

#### Physiological benefits

- Survives gastric acid barrier & bile
- Proliferation in intestine
- Release antimicrobial substances active against pathogenic bacteria
- Multi antibiotic resistance to several different antibiotics
- Confers immunity, fights pathogen & supports a healthy gut

#### Applications

##### Food

- As a nutraceutical / Dietary supplement in health food products
- Supplemented/ Fortified in foods like granola bars, chocolates & gummies
- Sachets, tablets, capsules

##### Pharmaceutical formulations

##### Feed

- Used as feed supplement in poultry, aqua culture, cattle, swine & other vet segments

Bacillus clausii with **unique encapsulation technology** was developed which would be of interest to companies wishing to incorporate Bacillus clausii into their products food/feed processed at high temperature and moisture.

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## Bacillus clausii SNZ 1971

### Specifications :

|                     |   |
|---------------------|---|
| Product name        | Bacillus clausii  |
| Source of origin    | Soil  |
| Ingredient          | Spore forming bacteria with excipients  |
| Appearance          | A grayish white powder slightly sweet in taste with characteristic odor   |
| Morphology          | Aerobic gram positive spores identified as purple colored rods under microscope.  |
| Gram staining       | Positive  |
| Storage/ Shelf life | Store in cool & dry place away from sunlight.<br>Shelf life is 24 months from date of manufacturing.  |
| Availability        | Bulk powder from 15- 100 billion cfu/g<br>Encapsulated powder   |
| *Documentation      | <b>Regulatory assessments</b><br>Sanzyme Biologics offers the following regulatory certificates for its clientele's requirements in regulatory filings.<br><br>Genetically characterized Bacillus clausii<br>Certificate of Analysis<br>Method of Analysis<br>Stability data<br>GMP certification<br>Material Safety Data Sheet<br>Antibiotic resistance profile testing<br>Allergen certificates<br>BSE TSE free certificates<br>GMO free certificates<br>Irradiation free certificate<br>Halal & Kosher Certification |

*\*Further details available on request*

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