

TECHNICAL SHEET

Think natural.® NATASEEN®-L

Description

Natamycin, the active ingredient in Nataseen®-L, also known as pimaricin, is a fungicide of the polyene macrolide group produced by natural strains of *Streptomyces natalensis* or of *Streptococcus lactis*, it is especially effective against yeasts and moulds.

Functional uses

Natural antimicrobial preservative, against yeasts and moulds

Physical properties

Specifications*

| | |
|------------|--|
| Synonyms | Natamycin, E 235 |
| Appearance | White to creamy-white crystalline powder |
| Storage | Product should be stored in cool (<20°C) and dry conditions (<65% RH). |
| Shelf life | 24 months from date of production |
| Package | 10 kg per carton / 20 x 500 gram jars |

Chemical properties

Specifications*

| | |
|----------------|--------------|
| Purity | Min. 50% |
| Lactose | Max. 50% |
| Loss on drying | Max. 8% |
| pH | 5,5 - 7,5 |
| Sulphated ash | Max. 0,5% |
| Arsenic | Max. 3 mg/kg |
| Lead | Max. 2 mg/kg |
| Mercury | Max. 1 mg/kg |

Microbiological properties

Specifications*

| | |
|------------------------|----------------|
| Total plate count | Max. 100 cfu/g |
| Salmonella in 25 g | Absent |
| Lysteria Monocytogenes | Absent |
| E.coli in 25 g | Absent |

*Accordingly to Commission Regulation (EU) No 231/2012, 9 March 2012.

| MINIMUM INHIBITORY CONCENTRATION (MIC) TABLES** (1) | |
|---|-------------|
| MYCETE | MIC (mg/kg) |
| <i>Aspergillus chevalieri</i> 4298 | 0.65 |
| <i>Aspergillus clavatus</i> | 0.1~0.5 |
| <i>Aspergillus flavus</i> CBS 3005 | 6.0 |
| <i>Aspergillus</i> 8867 | 4.5 |
| <i>Aspergillus flavus</i> Madagascar | 5.0 |
| <i>Aspergillus flavus</i> Port Lamy | 5.0 |
| <i>Aspergillus nidulans</i> | 1.0 |
| <i>Aspergillus niger</i> | 1.0~1.8 |
| <i>Aspergillus ochraceus</i> 4069 | 2.5 |
| <i>Aspergillus oryzae</i> | 10 |
| <i>Botrytis</i> sp | 1~2.5 |
| <i>Fusarium</i> sp | 10 |
| <i>Gloeosporium album</i> | 2.5 |
| <i>Mucor mucedo</i> | 1.2~5 |
| <i>Penicillium chrysogenum</i> | 0.6~1.3 |
| <i>Penicillium digitatum</i> | 2.5 |
| <i>Penicillium expansum</i> | 5 |
| <i>Penicillium islandicum</i> | 1.1 |
| <i>Penicillium notatum</i> 4640 | 5 |
| <i>Penicillium roqueforti</i> var.puctatum | 10 |
| <i>Rhizopus</i> 4758 | 10 |

**the values refer to 100% natamycin.

| MINIMUM INHIBITORY CONCENTRATION (MIC) TABLES** (2) | |
|---|-------------|
| SACCHAROMYCETE | MIC (mg/kg) |
| <i>Brettanomyces bruxellensis</i> | 1.5 |
| <i>Candida albicans</i> | 1.5~2.0 |
| <i>Candida guilliemondii</i> | 3.0 |
| <i>Candida veni</i> | 1.0 |
| <i>Hansenula polymorpha</i> | 1.0 |
| <i>Kloeckera apiculata</i> | 3.0 |
| <i>Saccharomyces bailii</i> | 1.0 |
| <i>Saccharomyces bayanus</i> | 1.0 |
| <i>Saccharomyces cerevisiae 8021</i> | 2.5 |
| <i>Saccharomyces cerevisiae var.ellipsoideus</i> | 2.5 |
| <i>Saccharomyces exiguous</i> | 2.5 |
| <i>Saccharomyces ludwigii 0339</i> | 2.5 |
| <i>Saccharomyces rousii 0562</i> | 5 |
| <i>Saccharomyces sake 0305</i> | 5 |
| <i>Torulopsis candida</i> | 2.0 |
| <i>Torulopsis lactis-condensi</i> | 3.0 |

**the values refer to 100% natamycin.