**PRODUCT INFORMATION**

**Natamycin**  
*Item No. 11634*

**CAS Registry No.:** 7681-93-8  
**Formal Name:** (5R,7R,24S)-22R-[(3S-amino-3,6-dideoxy-β-D-mannopyranosyl)oxy]-1R,3S,26S-trihydroxy-12R-methyl-10-oxo-6,11,28-troxtatricyclo[22.3.1.02,5,7]octacosa-8E,14E,16E,18E,20E-pentaene-25R-carboxylic acid

**Synonyms:** Antibiotic A 5283, CL 12,625, Delvocid, E 235, Mycophyt, Myprozine, Pimaricin, Synogil, Tennecetin

**MF:** C_{33}H_{47}NO_{13}  
**FW:** 665.7  
**Purity:** ≥95%  
**UV/Vis.:** \( \lambda_{\text{max}}: 219, 290, 303, 317 \text{ nm} \)

**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years

*Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.*

**Laboratory Procedures**

Natamycin is supplied as a crystalline solid. A stock solution may be made by dissolving the natamycin in the solvent of choice, which should be purged with an inert gas. Natamycin is soluble in organic solvents such as methanol and DMSO. The solubility of natamycin in these solvents is approximately 1 mg/ml.

**Description**

Natamycin is a tetracene macrolide that has been found in *S. natalensis* and has fungicidal activities.\(^1\) It is active against *Fusarium, A. flavus,* and *A. fumigatus* clinical isolates (MIC\(_{50}\) = 4, 32, and 2 µg/ml, respectively), and the plant pathogenic fungi *B. cinerea* and *P. expansum* when used at a concentration of 2 mg/L.\(^1,2\) Natamycin (100 and 200 mg/L, respectively) inhibits *B. cinerea*-induced gray mold disease in grapes and *P. expansum*-induced blue mold disease in jujube fruit.\(^2\) It reduces ulceration, edema, swelling, iritis, white blood cell accumulation, and loss of corneal transparency, as well as prevents *F. solani*-induced ocular keratitis, in a rabbit model of fungal keratitis.\(^3\) Formulations containing natamycin have been used in the treatment of fungal blepharitis, conjunctivitis, and keratitis, and as fungicides in agricultural settings and as food additives.

**References**