Product Name: Daptomycin  
Catalog No.: 3917  
Batch No.: 2  

CAS Number: 103060-53-3  

1. PHYSICAL AND CHEMICAL PROPERTIES

- **Batch Molecular Formula:** \(C_{72}H_{101}N_{17}O_{26}\cdot4H_2O\)
- **Batch Molecular Weight:** 1692.73
- **Physical Appearance:** Pale yellow solid
- **Solubility:** DMSO to 100 mM, water to 20 mM
- **Storage:** Store at -20°C

2. ANALYTICAL DATA

- **HPLC:** Shows 98.3% purity
- **\(^1\)H NMR:** Consistent with structure
- **Mass Spectrum:** Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
**Product Name:** Daptomycin  
**Catalog No.:** 3917  
**Batch No.:** 2  

**CAS Number:** 103060-53-3  
**IUPAC Name:** \( N\)-(1-Oxodecyl)-L-tryptophyl-D-asparaginyl-L-\( \alpha \)-aspartyl-L-threonylglycyl-L-ornithinyl-L-\( \alpha \)-aspartyl-D-alanyl-L-\( \alpha \)-aspartylglycyl-D-seryl-(3R)-3-methyl-L-\( \alpha \)-glutamyl-\( \alpha \),2-diamino-\( \gamma \)-oxo-benzene butanoic acid (13-4) lactone

**Description:**  
Lipopeptide, calcium-dependent antibiotic. Exhibits potent bacteriocidal activity against most gram-positive bacteria in vitro and in vivo, including antibiotic-resistant strains such as MRSA and VRE. Disrupts plasma membrane function; activity results in membrane depolarization leading to inhibition of protein, DNA and RNA synthesis.

**Physical and Chemical Properties:**  
**Batch Molecular Formula:** \( C_{72}H_{101}N_{17}O_{26}\cdot4H_2O \)  
**Batch Molecular Weight:** 1692.73  
**Physical Appearance:** Pale yellow solid  
**Minimum Purity:** >95%

**Storage:** Store at -20°C

**Solubility & Usage Info:**  
DMSO to 100 mM  
water to 20 mM

**Stability and Solubility Advice:**  
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).  
Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:  
SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.  
SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**  