**Product Name:** Treprostinil  
**CAS Number:** 81846-19-7  
**IUPAC Name:** 2-[(1R,2R,3aS,9aS)-2,3,3a,4,9,9a-Hexahydro-2-hydroxy-1-{(3S)-3-hydroxyoctyl}-1H-benz[flinden-5-yl]oxy]acetic acid

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1. PHYSICAL AND CHEMICAL PROPERTIES

   - **Batch Molecular Formula:** C_{23}H_{34}O_{5}  
   - **Batch Molecular Weight:** 390.51  
   - **Physical Appearance:** White solid  
   - **Solubility:** DMSO to 100 mM; ethanol to 50 mM  
   - **Storage:** Store at -20°C

2. ANALYTICAL DATA

   - **HPLC:** Shows 99.9% purity  
   - **\(^1\)H NMR:** Consistent with structure  
   - **Mass Spectrum:** Consistent with structure  
   - **Optical Rotation:** \([\alpha]_D = +34\) (Concentration = 1, Solvent = Ethanol)  
   - **Microanalysis:** Carbon Hydrogen Nitrogen  
     - Theoretical: 70.74  8.78  
     - Found: 70.59  8.78

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**Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use**

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Product Name: Treprostinil

Catalog No.: 5349  Batch No.: 2

CAS Number: 81846-19-7
IUPAC Name: 2-[(1R,2R,3aS,9aS)-2,3,3a,4,9,9a-Hexahydro-2-hydroxy-1-[(3S)-3-hydroxyoctyl]-1H-benz[f]inden-5-yloxy]acetic acid

Description:
Potent prostacyclin (PGI₂) analog (EC50 values are 0.6, 1.9 and 6.2 nM at DP₁, IP and EP₂ receptors respectively). Causes vasodilation of human pulmonary arteries and inhibits NFκB nuclear translocation in human alveolar macrophages in vitro.

Physical and Chemical Properties:
Batch Molecular Formula: C₃₂H₃₄O₅
Batch Molecular Weight: 390.51
Physical Appearance: White solid
Minimum Purity: >98%

Storage: Store at -20°C

Solubility & Usage Info:
DMSO to 100 mM
ethanol to 50 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: