1. PHYSICAL AND CHEMICAL PROPERTIES

- **Batch Molecular Formula:** $C_9H_{11}NO_4$
- **Batch Molecular Weight:** 197.19
- **Physical Appearance:** White solid
- **Solubility:**
  - Water to 5 mM
  - 1eq. HCl to 50 mM
- **Storage:** Store at -20°C
- **Batch Molecular Structure:**

2. ANALYTICAL DATA

- **HPLC:** Shows 100% purity
- **$^1$H NMR:** Consistent with structure
- **Mass Spectrum:** Consistent with structure
- **Optical Rotation:** $[\alpha]_D = -11.7$ (Concentration = 1, Solvent = 1N HCl)
- **Microanalysis:**
  - Carbon: 54.82
  - Hydrogen: 5.62
  - Nitrogen: 7.1
  - Theoretical
  - Found

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Product Name: L-DOPA
CAS Number: 59-92-7
IUPAC Name: L-3,4-Dihydroxyphenylalanine

Description:
Immediate precursor of dopamine, produced by tyrosine hydroxylase. Displays antiParkinsonian activity.

Physical and Chemical Properties:
Batch Molecular Formula: C9H11NO4
Batch Molecular Weight: 197.19
Physical Appearance: White solid
Minimum Purity: >99%

Storage: Store at -20°C

Solubility & Usage Info:
- Water to 5 mM
- 1 eq. HCl to 50 mM
CAUTION: L-DOPA rapidly degrades in alkaline solutions

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: