

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-06-13 10:27:26  
Date of Next Testing: 2026-06-12 10:27:26  
Product Name: **Mandyphos SL-M004-1**  
CAS Number: 494227-37-1  
Specifications & Purity:  $\geq 97\%$   
Lot #: F2306604  
SKU #: **S464300**  
**Analysis:** **215564**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Carbon by Elemental Analysis	70.80-75.18 (%)	72.27 %
Specific rotation [ $\alpha$ ] <sub>20</sub> /D(C=1, CHCl <sub>3</sub> )	-70~-60 (°)	-67.20°
Appearance(S464300)	Light Yellow to Very Dark Yellow and Orange-red to Very Dark Orange Powder or Crystals	Light Yellow to Very Dark Yellow and Orange-red to Very Dark Orange Powder or Crystals
NMR Spectrum 1H	Conforms to Structure	Conforms to Structure
Phosphorus NMR spectrum	conforms to structure	Conforms to Structure



John Su  
QA & QC Manager