

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-09-14 14:06:23
 Date of Next Testing: 2028-09-13 14:06:23
 Product Name: **DL-Tryptophan**
 CAS Number: 54-12-6
 Specifications & Purity: $\geq 99\%$
 Lot #: K2009051
 SKU #: **T103482**
 Version: **0**
 Analysis #: **411641**
 Storage Temperature: Protected from light, Room temperature, Desiccated

Parameter	Limit Values	Result
Carbon by Elemental Analysis	64-65.3 (%)	64.80000 %
Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in H}_2\text{O plus 2 drops 6N HCl})$	-1-1 (°)	-1.00000 °
Purity(HPLC)	99-100 (%)	99.95000 %
Nitrogen by Elemental Analysis	13.4-14 (%)	13.40000 %
Appearance (T103482)	White to Off-White Powder or Crystals	White to Off-White Powder or Crystals
Infrared spectrum	Conforms to Structure	Conforms to Structure
Solubility 1M HCl , Colorless to Yellow, Clear to Slightly Hazy, 10mg/ml	pass	Pass



John Su
QA & QC Manager