

## Certificate of Analysis

Date of Testing: 2025-04-21 10:36:38

Date of Next Testing: 2029-04-20 10:36:38

Product Name: **DL-Tryptophan**

CAS Number: 54-12-6

Specifications & Purity:  $\geq 99\%$

Lot #: D2518547

SKU #: **T103482**

Version: **0**

Analysis #: **393339**

Storage Temperature: Protected from light, Desiccated

| Parameter                                                                           | Limit Values                          | Result                                |
|-------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------|
| Carbon by Elemental Analysis                                                        | 64-65.3 (%)                           | 64.41 %                               |
| Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in H}_2\text{O plus 2 drops 6N HCl})$ | -1-1 (°)                              | -0.88 °                               |
| Purity(HPLC)                                                                        | 99-100 (%)                            | 100.00000 %                           |
| Nitrogen by Elemental Analysis                                                      | 13.4-14 (%)                           | 13.83 %                               |
| Appearance (T103482)                                                                | White to Off-White Powder or Crystals | White to Off-White Powder or Crystals |
| Solubility 1M HCl , Colorless to Yellow, Clear to Slightly Hazy, 10mg/ml            | pass                                  | Pass                                  |
| Infrared spectrum                                                                   | Conforms to Structure                 | Conforms to Structure                 |



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