

CERTIFICATE OF ANALYSIS

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|-------------------|-------------------|--------------|-------------------|
| Product name: | L-Tyrosine | | |
| Batch No.: | CP3719110901 | Quantity: | 1200KGS |
| Manufacture date: | November 09, 2019 | Expiry date: | November 09, 2021 |

| Reference standard: | AJI92 | |
|---------------------------------------|--|-----------|
| ITEM | STANDARD | RESULT |
| Identification: | Infrared Absorption | Qualified |
| Specific rotation $[\alpha]_D^{20}$: | -9.8° to -11.2° | -10.5° |
| Loss on drying | not more than 0.3% | 0.13% |
| Residue on ignition | not more than 0.4% | 0.07% |
| Chloride (Cl) | not more than 0.4% | <0.03% |
| Sulfate (SO ₄) | not more than 0.4% | <0.03% |
| Iron (Fe) | not more than 0.003% | <0.002% |
| Heavy metals (Pb) | not more than 0.0015% | <0.001% |
| Chromatographic Purity | As per USP30 (By TLC) | Qualified |
| Individual impurity | ≤0.5% | <0.5% |
| Total impurity | ≤2.0% | <2.0% |
| Organic volatile impurities | Meets the requirements | Qualified |
| Assay | 98.5 to 101.5% | 99.63% |
| Conclusion: | Material conforms to the USP30 standard. | |
| Analysis date: | November 09, 2019 | |