


Certificate of Analysis

| | | | |
|-----------------|---------|---------------------------|--------------|
| Product | Toluene | Batch No. | : 21 06 0033 |
| Grade | HPLC | Manufacturing date | : 03/06/2021 |
| Code No. | LC1347 | Best before | : 06/2025 |


| Items | Descriptions | Specifications | Test Results |
|-------|--------------------------------------|----------------------------|----------------------------|
| 1 | Assay (by GC.) | 99.8% min. | 99.8% |
| 2 | Appearance | Clear and colorless liquid | Clear and colorless liquid |
| 3 | Identity (IR) | Passes test | Passes test |
| 4 | Color (APHA) | 10 max. | < 10 |
| 5 | Water (by Coulometry) | 0.01% max. | 0.006% |
| 6 | Acidity (mEq./g.) | 0.0002 max. | < 0.0002 |
| 7 | Alkalinity (mEq./g.) | 0.0004 max. | < 0.0004 |
| 8 | Residue on Evaporation | 0.0005% max. | < 0.0005% |
| 9 | Sulfur Compounds (S) | 0.003% max. | < 0.003% |
| 10 | Substances darkened by sulfuric acid | Passes test | Passes test |
| 11 | UV Transmission Levels (%T) | | |
| | 350 nm | 99% min. | 99.9% |
| | 330 nm | 98% min. | 98.9% |
| | 310 nm | 90% min. | 97.2% |
| | 300 nm | 80% min. | 93.6% |
| | 290 nm | 50% min. | 81.4% |
| 12 | Fluorescence (as quinine) | | |
| | at 365 nm | 2 ppb max. | < 2 ppb |

Product passed through 0.2 micron final filter.

This is to certify the above batch has been tested and complies with this specification.



 Chemist



 Technical Manager