

## Certificate of Analysis

|                 |                 |                           |              |
|-----------------|-----------------|---------------------------|--------------|
| <b>Product</b>  | Tetrahydrofuran | <b>Batch No.</b>          | : 21 06 0332 |
| <b>Grade</b>    | HPLC            | <b>Manufacturing date</b> | : 29/06/2021 |
| <b>Code No.</b> | LC1200          | <b>Best before</b>        | : 06/2022    |

| Items | Descriptions                                 | Specifications             | Test Results               |
|-------|--|----------------------------|----------------------------|
| 1     | Assay (by GC.)                               | 99.9% min.                 | 99.9%                      |
| 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)                        | 0.02% max.                 | 0.006%                     |
| 6     | Acidity (mEq./g.)                            | 0.0002 max.                | < 0.0002                   |
| 7     | Alkalinity (mEq./g.)                         | 0.0002 max.                | < 0.0002                   |
| 8     | Residue on Evaporation                       | 0.0001% max.               | < 0.0001%                  |
| 9     | Peroxide (as H <sub>2</sub> O <sub>2</sub> ) | 0.01% max.                 | < 0.01%                    |
| 10    | UV Transmission Levels (%T)                  |                            |                            |
|       | 280 nm                                       | 99% min.                   | 99.9%                      |
|       | 250 nm                                       | 80% min.                   | 95.8%                      |
|       | 240 nm                                       | 70% min.                   | 91.9%                      |
|       | 230 nm                                       | 35% min.                   | 74.2%                      |
|       | 218 nm                                       | 30% min.                   | 33.7%                      |
| 11    | Fluorescence (as quinine)                    |                            |                            |
|       | at 254 nm                                    | 1 ppb max.                 | < 1 ppb                    |
|       | at 365 nm                                    | 1 ppb max.                 | < 1 ppb                    |

Product passed through 0.2 micron final filter.

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

Ladaphan

Chemist

Achan

Technical Manager