

## Certificate of Analysis

|                 |                      |                           |              |
|-----------------|----------------------|---------------------------|--------------|
| <b>Product</b>  | Methyl-t-butyl ether | <b>Batch No.</b>          | : 21 05 0022 |
| <b>Grade</b>    | HPLC                 | <b>Manufacturing date</b> | : 16/05/2021 |
| <b>Code No.</b> | LC1125               | <b>Best before</b>        | : 05/2025    |

| Items | Descriptions                                 | Specifications             |      | Test Results               |
|-------|--|----------------------------|------|----------------------------|
| 1     | Assay (by GC.)                               | 99.8%                      | 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. | 0.01%                      |
| 6     | Acidity (mEq./g.)                            | 0.0002                     | max. | < 0.0002                   |
| 7     | Alkalinity (mEq./g.)                         | 0.0002                     | max. | < 0.0002                   |
| 8     | Residue on Evaporation                       | 0.0002%                    | max. | < 0.0002%                  |
| 9     | Peroxide (as H <sub>2</sub> O <sub>2</sub> ) | 1 ppm                      | max. | < 1 ppm                    |
| 10    | UV Transmission Levels (%T)                  |                            |      |                            |
|       | 280 nm                                       | 99%                        | min. | 99.9%                      |
|       | 270 nm                                       | 98%                        | min. | 99.8%                      |
|       | 260 nm                                       | 90%                        | min. | 98.9%                      |
|       | 255 nm                                       | 85%                        | min. | 98.1%                      |
|       | 240 nm                                       | 60%                        | min. | 94.1%                      |
| 11    | Fluorescence (as quinine)                    |                            |      |                            |
|       | 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