

## Certificate of Analysis

|                 |               |                           |              |
|-----------------|---------------|---------------------------|--------------|
| <b>Product</b>  | n-Heptane 95% | <b>Batch No.</b>          | : 21 05 0135 |
| <b>Grade</b>    | HPLC          | <b>Manufacturing date</b> | : 23/05/2021 |
| <b>Code No.</b> | LC1078        | <b>Best before</b>        | : 05/2025    |

| Items | Descriptions                         | Specifications             |      | Test Results               |
|-------|--------------------------------------|----------------------------|------|----------------------------|
| 1     | Assay (by GC.)                       | 95.0%                      | min. | 99.1%                      |
| 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. | 0.005%                     |
| 6     | Acidity (mEq./g.)                    | 0.0005                     | max. | < 0.0005                   |
| 7     | Alkalinity (mEq./g.)                 | 0.0002                     | max. | < 0.0002                   |
| 8     | Residue on Evaporation               | 0.0003%                    | max. | < 0.0003%                  |
| 9     | Substances darkened by sulfuric acid | Passes test                |      | Passes test                |
| 10    | UV Transmission Levels (%T)          |                            |      |                            |
|       | 250 nm                               | 99%                        | min. | 99.8%                      |
|       | 240 nm                               | 98%                        | min. | 99.3%                      |
|       | 230 nm                               | 95%                        | min. | 98.0%                      |
|       | 220 nm                               | 80%                        | min. | 94.3%                      |
|       | 210 nm                               | 60%                        | min. | 84.0%                      |
| 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