



## CERTIFICATE OF ANALYSIS

PRODUCT NAME: CITRIC ACID MONOHYDRATE 8-80MESH

BATCH NO.: 20310317

QUANTITY: 880BAGS

PACKING: IN 25kg BAG

PRODUCTION DATE: 27/03/2022

NET WEIGHT: 22000kg

GROSS WEIGHT: 22176kg

ANALYSIS DATE: 29/03/2022

EXPIRY DATE: 26/03/2025

| ITEM                                   | STANDARD                                                                             | ACTUAL DATA                                                                          | TEST METHOD            |
|----------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------------------------|
| CHARACTERS                             | COLOURLESS<br>TRANSLUCENT<br>CRYSTALS OR AS<br>WHITE, FINE,<br>CRYSTALLINE<br>POWDER | COLOURLESS<br>TRANSLUCENT<br>CRYSTALS OR AS<br>WHITE, FINE,<br>CRYSTALLINE<br>POWDER | FCC                    |
| IDENTIFICATION                         | PASS TEST                                                                            | PASS TEST                                                                            | EP                     |
| CLARITY AND COLOUR OF<br>SOLUTION      | PASS TEST                                                                            | PASS TEST                                                                            | BP                     |
| CONTENT                                | 99.5-100.5%                                                                          | 100.0%                                                                               | BP                     |
| MOISTURE                               | 7.5-8.8%                                                                             | 8.7%                                                                                 | FCC                    |
| OXALATE/OXALIC ACID                    | ≤100mg/kg                                                                            | <100mg/kg                                                                            | FAO/WHO CCFAS<br>Vol.4 |
| SULPHATE                               | ≤150ppm                                                                              | <150ppm                                                                              | BP                     |
| READILY CARBONISABLE<br>SUBSTANCES     | ABS ≤0.52<br>TRA ≥30%                                                                | <0.52<br>>30%                                                                        | FCC                    |
| RESIDUE ON IGNITION<br>(SULPHATED ASH) | ≤0.05%                                                                               | 0.01%                                                                                | FCC                    |
| HEAVY METALS                           | ≤10ppm                                                                               | <5ppm                                                                                | IP                     |
| ARSENIC                                | ≤1mg/kg                                                                              | <0.1mg/kg                                                                            | IP                     |
| LEAD                                   | ≤0.5mg/kg                                                                            | <0.1mg/kg                                                                            | FCC                    |
| MERCURY                                | ≤1mg/kg                                                                              | <0.1mg/kg                                                                            | GB 5009.17             |
| ALUMINIUM                              | ≤0.2ppm                                                                              | <0.2ppm                                                                              | BP                     |
| BACTERIAL ENDOTOXINS                   | ≤0.5IU/mg                                                                            | <0.5IU/mg                                                                            | BP                     |
| ISOCITRIC ACID                         | PASS TEST                                                                            | PASS TEST                                                                            | JSFA                   |
| BARIUM                                 | PASS TEST                                                                            | PASS TEST                                                                            | IP                     |
| CALCIUM                                | ≤200ppm                                                                              | <200ppm                                                                              | IP                     |
| IRON                                   | ≤50ppm                                                                               | <50ppm                                                                               | IP                     |
| CHLORIDE                               | ≤50ppm                                                                               | <50ppm                                                                               | IP                     |

CONCLUSION: THE QUALITY OF THIS BATCH CONFORMS WITH ALL REQUIREMENTS  
BP/EP/USP/FCC/E330/IP/JSFA/FAO/WHO CCFAS Vol.4 WHEN TESTED ACCORDING TO THESE  
COMPENDIA.

崔久霞

