

## CERTIFICATE OF ANALYSIS

|   |                           |
|---|---------------------------|
| Product Name : <b>POTASSIUM NITRATE</b> | Release Date : 1-OCT-2025 |
| Lot No. : PEL/TCG/241356/25             | Mol. Weight : 101.11      |
| Mol. Formula : KNO <sub>3</sub>         | CAS No. : 7757-79-1       |
| Code No. : PEL100                       | Exp. Date : Apr-2030      |
| Mfg. Date : May-2025                    |                           |

| Sr. | Tests                                | Specifications           | Results                  |
|-----|--------------------------------------|--------------------------|--------------------------|
| 1   | Appearance                           | White crystalline powder | White crystalline powder |
| 2   | Assay (Titration after Ion exchange) | 99 - 100.5%              | 99.5%                    |
| 3   | Identity (acc. to pharmacopoeias)    | Passes test              | Passes test              |
| 4   | Appearance of solution               | Passes test              | Passes test              |
| 5   | Reducing substance                   | Passes test              | Passes test              |
| 6   | pH (5% solution in water; 20°C)      | 4.2 - 8.2                | 5.86                     |
| 7   | Acidity or alkalinity                | Passes test              | Passes test              |
| 8   | Chloride (Cl)                        | Max 0.001%               | 0.0009%                  |
| 9   | Chlorate and perchlorate (as Cl)     | Passes test              | Passes test              |
| 10  | Sulphate (SO <sub>4</sub> )          | Max 0.003%               | 0.0019%                  |
| 11  | Phosphate (PO <sub>4</sub> )         | Max 0.0005%              | 0.0003%                  |
| 12  | Lead (Pb)                            | Max 0.0005%              | Not detected             |
| 13  | Arsenic (As)                         | Max 0.0003%              | <0.0003%                 |
| 14  | Iron (Fe)                            | Max 0.0003%              | Not detected             |
| 15  | Calcium (Ca)                         | Max 0.001%               | Not detected             |
| 16  | Sodium (Na)                          | Max 0.02%                | 0.001%                   |
| 17  | Ammonium (NH <sub>4</sub> )          | Max 0.001%               | 0.0008%                  |
| 18  | Iodate (IO <sub>3</sub> )            | Max 0.0005%              | <0.0005%                 |
| 19  | Nitrite (NO <sub>2</sub> )           | Max 0.0005%              | <0.0005%                 |
| 20  | Loss on drying (at 105°C)            | Max 0.5%                 | 0.22%                    |

**CONCLUSION** - Based on the evaluation, the product meets all applicable **PELICAN (Trust Lies Here)** specifications.


  
**Pelican**  
 (Trust lies here)