



## Unilong Industry Co., Ltd

Add: No.8 Bldg Shuntai, No.2000 Shunhua Rd, High-Tech Zone, Jinan City, Shandong Province, China  
Contact: +86-18053149984 Website: [www.unilongindustry.com](http://www.unilongindustry.com)

### CERTIFICATE OF ANALYSIS

|                          |                           |                           |             |
|--------------------------|---------------------------|---------------------------|-------------|
| <b>Product Name:</b>     | D-Camphorsulfonic Acid    | <b>Batch No.</b>          | JL20230516  |
| <b>CAS</b>               | 3144-16-9                 | <b>MF Date</b>            | MAY.16,2023 |
| <b>Packing</b>           | 25kg/Drum                 | <b>Analysis Date</b>      | MAY.16,2023 |
| <b>Item</b>              | <b>Standard</b>           | <b>Result</b>             |             |
| <b>Appearance</b>        | White to off white powder | White to off white powder |             |
| <b>Optical rotation</b>  | +21.0° ~+23.0°            | Qualified                 |             |
| <b>Loss on drying</b>    | ≤1.0%                     | Qualified                 |             |
| <b>Melting point(°C)</b> | 192°C~200°C               | Qualified                 |             |
| <b>ASSAY</b>             | ≥99%                      | Qualified                 |             |
| <b>Conclusion</b>        | Qualified                 |                           |             |

**Analyst:** Wen Qian

**Quality Assurance Officer:** Zhan Peng