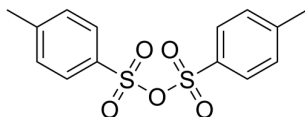


## Certificate of Analysis

### Compound Information

|                            |   |
|----------------------------|---|
| <b>Product Name:</b>       | 4-Toluenesulfonic anhydride                                   |
| <b>Cat. No.:</b>           | 1062140   |
| <b>CAS No.:</b>            | 4124-41-8   |
| <b>Molecular Formula:</b>  | C <sub>14</sub> H <sub>14</sub> O <sub>5</sub> S <sub>2</sub> |
| <b>Molecular Weight:</b>   | 326.39  |
| <b>Chemical Structure:</b> |   |



### Batch Information

|                     |                              |
|---------------------|------------------------------|
| <b>Batch No.:</b>   | L384878                      |
| <b>Storage:</b>     | -20°C, stored under nitrogen |
| <b>Test Date:</b>   | 2024-03-26                   |
| <b>Retest Date:</b> | 2027-03-25                   |
| <b>Origin:</b>      | Shanghai, China              |

### QC Summary

|   | Specification   | Result                    |
|---|---|---------------------------|
| <b>Appearance:</b>                                  | White to off-white (Solid)  | White (Solid)             |
| <b><sup>1</sup>H NMR Spectrum:</b>                  | Consistent with structure   | Consistent with structure |
| <b>Purity, ω/%:</b>                                 | ≥98.0   | 94                        |
| <b>Structure Identification(Infrared Spectrum):</b> | Conforms to Structure   | Conforms to Structure     |
| <b>Conclusion:</b>                                  | The product has been tested and complies with the given specifications. |                           |

Caution: Research use only and are not intended for human use.

Tel: 400-821-0725

E-mail: [product@leyan.com](mailto:product@leyan.com)

Address: No. 1999 Zhangheng Road, Building 3, Zhangjiang High-Tech Park, Shanghai