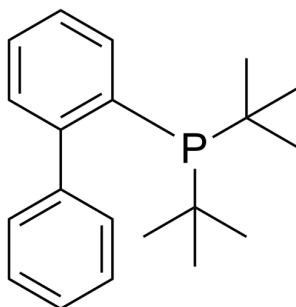


## Certificate of Analysis

### Compound Information

**Product Name:** JohnPhos  
**Cat. No.:** 1026350  
**CAS No.:** 224311-51-7  
**Molecular Formula:** C<sub>20</sub>H<sub>27</sub>P  
**Molecular Weight:** 298.40  
**Chemical Structure:**



### Batch Information

**Batch No.:** Lc1212055  
**Storage:** 2-8°C, stored under nitrogen  
**Test Date:** 2019-12-12  
**Retest Date:** 2023-06-21  
**Origin:** Shanghai, China

### QC Summary

**Appearance:** White to off-white (Solid)  
**<sup>1</sup>H NMR Spectrum:** Consistent with structure  
**Purity (HPLC):** 99.21%  
**Conclusion:** 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