

Shanghai Aladdin Biochemical Technology Co., LTD  
809 Chuhua Branch Road, Fengxian District, Shanghai 201400, China

## Certificate of Analysis

Date of Testing: 2023-09-28 10:39:41  
Date of Next Testing: 2027-09-27 10:39:41  
Product Name: **N,N'-Di-sec-butyl-p-phenylenediamine**  
CAS Number: 101-96-2  
Specifications & Purity: 96%  
Lot #: A2002136  
SKU #: **D111086**  
Analysis: **281400**

| Parameter                           | Limit Values          | Result                |
|-------------------------------------|-----------------------|-----------------------|
| Ash                                 | 0-0.2 (%)             | 0.14000 %             |
| Refractive index n <sub>20</sub> /D | 1.533-1.539           | 1.53500               |
| Density (20°C)                      | 0.939-0.944           | 0.94100               |
| Purity(GC)                          | 96-100 (%)            | 97.83500 %            |
| Appearance (D111086)                | Red to brown liquid   | Red to brown liquid   |
| Proton NMR spectrum                 | Conforms to Structure | Conforms to Structure |



John Su  
QA & QC Manager