

# Chem-Impex International, Inc.

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## Certificate of Analysis

**Catalogue Number** 24622  
**Product** (R)-(+)-1,1'-Binaphthyl-2,2'-diamine

**Lot Number** 001702-20130307  
(R)-(+)-1,1'-Bi(2-naphthylamine)  
(R)-(+)-2,2'-Diamino-1,1'-binaphthalene

**CAS Number** 18741-85-0

**Molecular Formula** C<sub>20</sub>H<sub>16</sub>N<sub>2</sub>

**Molecular Weight** 284.36

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**Appearance** White crystal

**Melting Point** 238-244 °C

**Optical Rotation** [α]<sub>D</sub><sup>25</sup> = + 156 ° (C=1.0 in pyridine)

**Chiral HPLC** 99.98% (ee)

**Purity by HPLC** 99.8%

**Storage** Store at 0-8°C

**Remarks** See material safety data sheet for additional information  
For laboratory use only

The foregoing is a copy of the Certificate of Analysis as provided by our supplier



**Bala Kumar**  
Quality Control Manager