Chem-Impex International, Inc.

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935 Dillon Drive 825 Dillon Drive Wood Dale, IL 60191 Wood Dale, IL 60191

Certificate of Analysis

Catalogue Number 31870

Product (S)-1-Boc-3-methylpiperazine

Lot Number 001702-20170308

tert-Butyl (S)-3-methyl-1-piperazinecarboxylate

CAS Number 147081-29-6 Molecular Formula $C_{10}H_{20}N_2O_2$

Molecular Weight 200.28

Appearance White powder or oily solid

Water Content (Karl

Fisher)

Optical Rotation

0.21%

Purity by GC 99.15%

Chiral Purity 100% (ee, HPLC)

Application Laboratory chemicals, Manufacture of substances.

Storage Store at 0-8 °C

Remarks See material safety data sheet for additional information

 $[a]_D^{20} = -15.71^{\circ}$ (C=1 in 1, 4-Dioxane)

For laboratory use only

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

Bala Kumar

Quality Control Manager