



## Certificate of analysis

Product name: (-)-Corey lactone diol

Cas number: 32233-40-2

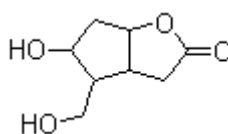
Molecular Formula: C<sub>8</sub>H<sub>12</sub>O<sub>4</sub>

Molecular Weight: 172.18

Date of production: Nov.25,2016

Batch NO: 20161125

Exp Date: Nov.24,2018



Chemical structure:

Items	Specifications	Results
Appearance	White to off-white crystalline	White Powder
Melting Point	114°C to 118°C	116.5°C
loss on drying by TGA	≤1.0%	0.20%
Identification	HNMR IR	Conforms
Optical rotation	≤ -41 <sub>D</sub> (C=1.4, CH <sub>3</sub> OH)(20°C, 589nm)	-47.0°
(+)-Corey Lactone Diol (By Chiral HPLC)	≤0.50%	N.D
Retated Substance	impurity A : ≤0.10% impurity B : ≤0.10% Any other impurity ≤0.5% Total impurities ≤1.0%	N.D N.D 0.06% 0.11%
Purity(HPLC)	≥98%	98.9%

**Conclusion: It complies with the Enterprise Standard.**

Analyst:Zhao

Checker:Liu

Q.C Director. Fang