

# Certificate of Analysis

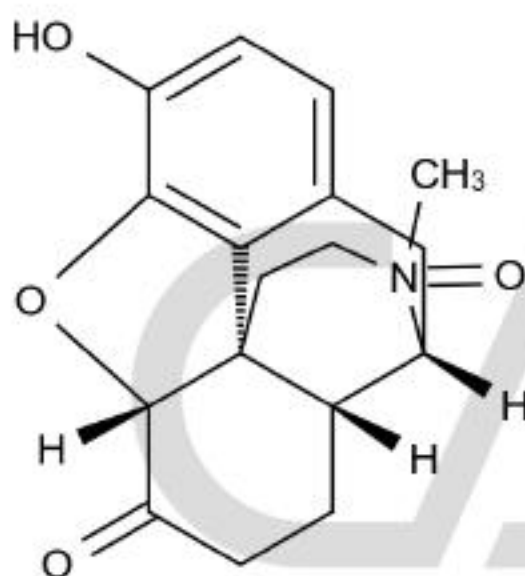
## Reference Material & Standard

|                           |                                                   |                          |                                           |
|---------------------------|---------------------------------------------------|--------------------------|-------------------------------------------|
| <b>Product Name:</b>      | Hydromorphone N-Oxide Hydrochloride CII (1323019) | <b>Catalogue Number:</b> | C1057318                                  |
| <b>Synonyms:</b>          | N/A                                               | <b>Lot Number:</b>       | 1128-SA-7528                              |
| <b>CAS Number:</b>        | 109648-80-8                                       | <b>Expiry Date:</b>      | Nov 27, 28                                |
| <b>Molecular Formula:</b> | C <sub>17</sub> H <sub>19</sub> NO <sub>4</sub>   | <b>Storage:</b>          | 2°C ~ 8°C Protected from light and Sealed |
| <b>Molecular Weight:</b>  | 301.34                                            |                          |                                           |

**Warning:**



**Chemical Structure:**



| Test Items      | Method            | Results   |
|-----------------|-------------------|-----------|
| Appearance      | Visual inspection | Solid     |
| Identification: | LC&HNMR           | Confirmed |
| Purity:         | HPLC              | 98.217%   |

**Signature:**

Prepared by:

*Lisa*

Reviewed by:

*Yuki*

Approved by General Manager:

*David*

Date: Nov 28, 24

Date: Nov 28, 24

Date: Nov 28, 24



Add: 3rd Floor, Building B, No.179, Guangpu Rd East, Huangpu District, Guangzhou, China

Tel: +86-20-81960175

Email: supports@cato-chem.com

Web: <https://www.cato-chem.com>

Page 1 of 6



Official WeChat

## Directions:

1. *Intended use: This product is suitable for identification and quantification of the analyte(s), instrument calibration, method development and quality control in analytical and R&D applications. It is not intended for administration to humans or animals, and shall not be used to diagnose, treat or cure any diseases.*
2. *Minimum sample size: 1mg is recommended as the minimum sample size.*
3. *Metrological traceability: This product meets the requirements of ISO 17034 and is traceable to NMI through an unbroken chain of comparisons.*
4. *Instructions for handling and correct use: Handling in a well-ventilated place.*

## Document Version:

| Revision No. | Date       | Reason for Revision |
|--------------|------------|---------------------|
| 01           | Nov 28, 24 | First release.      |

