

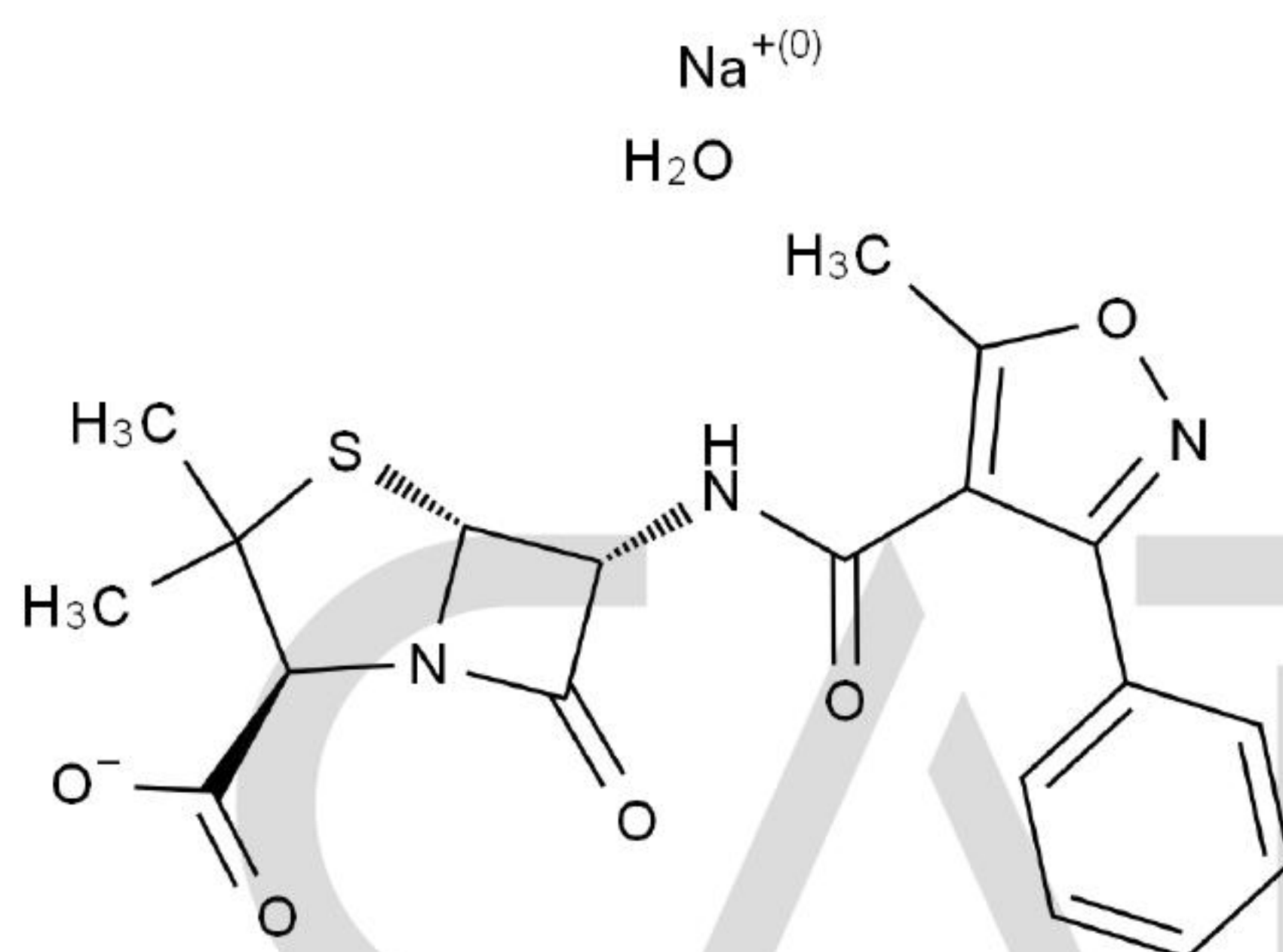
# Certificate of Analysis

## Reference Material & Standard

|                    |                                                                                     |                   |                                           |
|--------------------|-------------------------------------------------------------------------------------|-------------------|-------------------------------------------|
| Product Name:      | Oxacillin Sodium Monohydrate                                                        | Catalogue Number: | CCAD300345                                |
| Synonyms:          | N/A                                                                                 | Lot Number:       | 1115-RF-0090                              |
| CAS Number:        | 7240-38-2                                                                           | Expiry Date:      | Nov 13, 2028                              |
| Molecular Formula: | C <sub>19</sub> H <sub>18</sub> N <sub>3</sub> O <sub>5</sub> S Na H <sub>2</sub> O | Storage:          | 2°C ~ 8°C Protected from light and Sealed |
| Molecular Weight:  | 400.43 22.99 18.02                                                                  | Warning:          |                                           |



### Chemical Structure:



| Test Items                | Method            | Results     |
|---------------------------|-------------------|-------------|
| Appearance                | Visual inspection | White Solid |
| Identification            | LCMS&HNMR         | Confirmed   |
| Purity                    | HPLC              | 97.711%     |
| Water Content             | Karl Fischer      | 4.7559%     |
| Water Content(Free Water) |                   | 0.6738%     |
| Assay                     |                   | 97.1%       |
| Uncertainty               |                   | ±2.0%       |

### Comment:

- The content of crystal water is 4.0821%.
- The calculation of the 100% method follows the formula (calculated on the non-dried basis):  

$$\text{Assay (\%)} = (100\% - \text{Water Content(Free Water)}) * \text{Purity HPLC (\%)} / 100\%$$
 Water Content(Free Water) is considered as absolute effect, HPLC purity is considered as relative effect.
- The uncertainty values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

### Signature:

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Reviewed by:

*Lisa*

Approved by General Manager:

*David*

Date: Nov 14, 2024

Date: Nov 15, 2024

Date: Nov 15, 2024

