

# Certificate of Analysis

## Reference Material & Standard

|                           |                                              |                            |                                           |
|---------------------------|----------------------------------------------|----------------------------|-------------------------------------------|
| <b>Product Name:</b>      | Bisoprolol EP Impurity S                     | <b>Catalogue Number:</b>   | C4X-124719                                |
| <b>Synonyms:</b>          | N/A                                          | <b>Lot Number:</b>         | 0511-RC-0036                              |
| <b>CAS Number:</b>        | 123-08-0                                     | <b>Expiry Date:</b>        | Jun 14, 2030                              |
| <b>Molecular Formula:</b> | C <sub>7</sub> H <sub>6</sub> O <sub>2</sub> | <b>Storage:</b>            | 2°C ~ 8°C Protected from light and Sealed |
| <b>Molecular Weight:</b>  | 122.12                                       | <b>Shipping Condition:</b> | Shipping at Room Temperature              |

Chemical Structure:



| Test Items     | Method               | Results         |
|----------------|----------------------|-----------------|
| Appearance     | Visual inspection    | Off-White Solid |
| Identification | LCMS&IR&UV&CNMR&HNMR | Confirmed       |
| Purity         | HPLC                 | 99.8982%        |
| Loss on Drying | TGA                  | 0.3954%         |
| Assay          |                      | 99.5%           |

## Comment:

The calculation of the mass balance method follows the formula (calculated on the non-dried basis):

Assay (%) = (100% - Loss on Drying) \* Purity HPLC (%) / 100%

Loss on Drying is considered as absolute effect, HPLC purity is considered as relative effect.

Signature:

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Approved by General Manager:

*David*

Date: Jun 15, 2026

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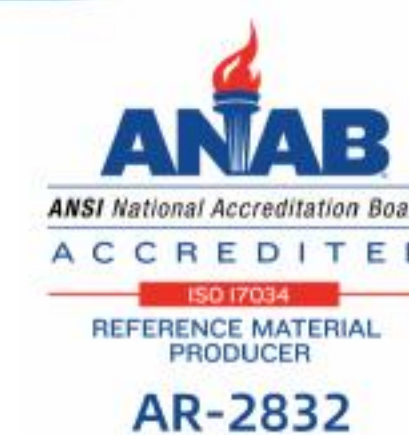
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