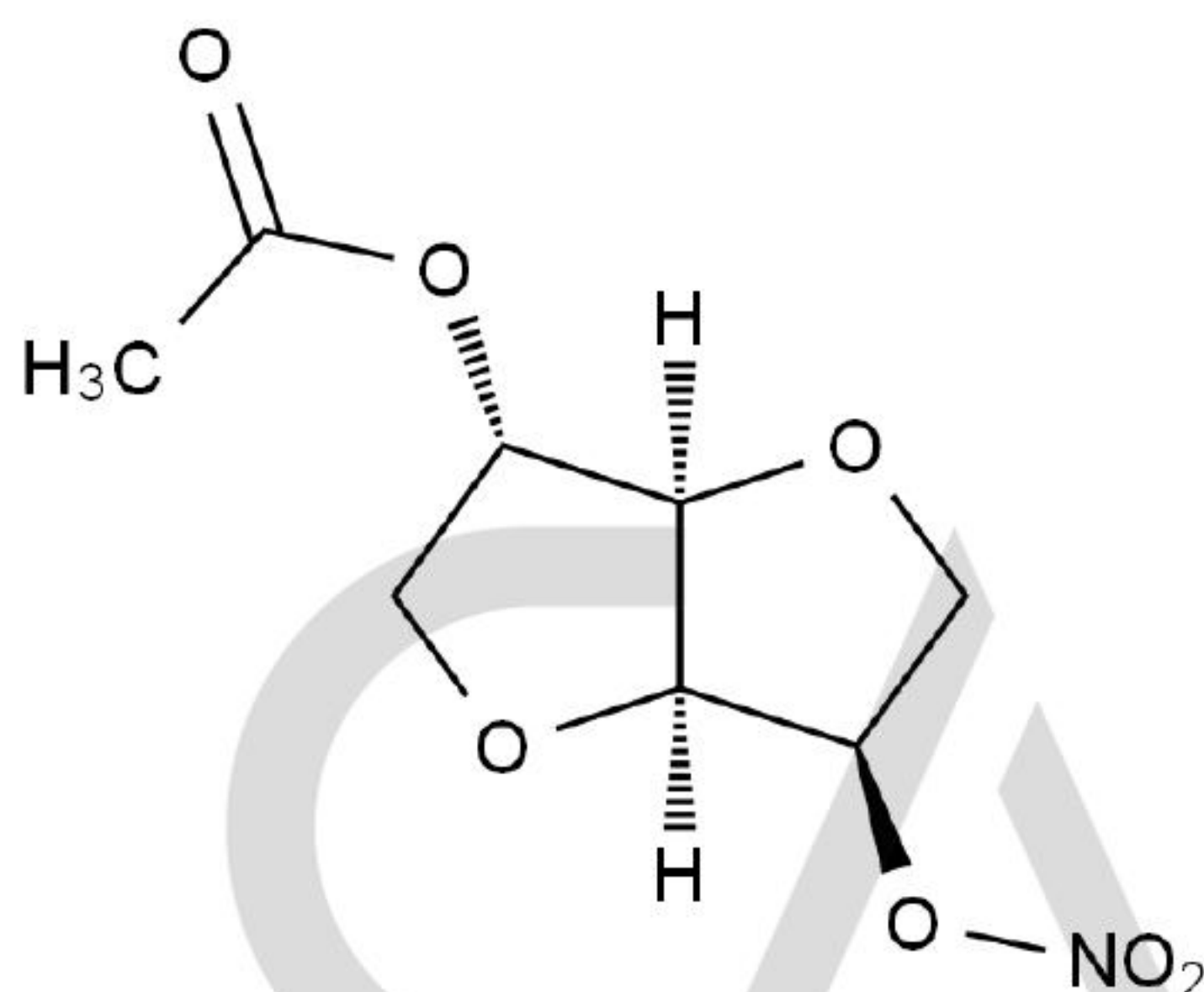


# Certificate of Analysis

## Reference Material & Standard

|                           |                                                |                            |                                           |
|---------------------------|------------------------------------------------|----------------------------|-------------------------------------------|
| <b>Product Name:</b>      | Isosorbide Dinitrate Impurity 4                | <b>Catalogue Number:</b>   | C4X-22384                                 |
| <b>Synonyms:</b>          | N/A                                            | <b>Lot Number:</b>         | 0420-RH-0060                              |
| <b>CAS Number:</b>        | 39813-48-4                                     | <b>Expiry Date:</b>        | Apr 21, 2030                              |
| <b>Molecular Formula:</b> | C <sub>8</sub> H <sub>11</sub> NO <sub>7</sub> | <b>Storage:</b>            | 2°C ~ 8°C Protected from light and Sealed |
| <b>Molecular Weight:</b>  | 233.18                                         | <b>Shipping Condition:</b> | Shipping at Room Temperature              |

Chemical Structure:



| Test Items     | Method            | Results         |
|----------------|-------------------|-----------------|
| Appearance     | Visual inspection | Off-White Solid |
| Identification | LCMS&HNMR         | Confirmed       |
| Purity         | HPLC              | 99.090%         |
| Loss on Drying | TGA               | 0.5167%         |
| Assay          |                   | 98.6%           |

## 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:

Prepared by:

*Nice*

Reviewed by:

*Koi*

Approved by General Manager:

*David*

Date: Apr 22, 2026

Date: Apr 22, 2026

Date: Apr 22, 2026



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>

