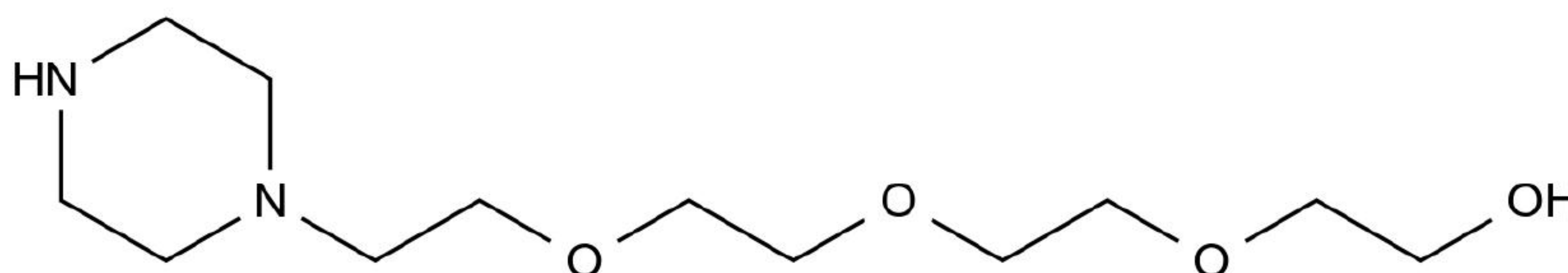


# Certificate of Analysis

## Reference Material

|                    |                                                               |                   |                                           |
|--------------------|---------------------------------------------------------------|-------------------|-------------------------------------------|
| Product Name:      | Quetiapine Impurity 52                                        | Catalogue Number: | C4X-124452                                |
| Chemical Name:     | N/A                                                           | Lot Number:       | 0721-RE-0026                              |
| CAS Number:        | N/A                                                           | Expiry Date:      | Jul 19, 2026                              |
| Molecular Formula: | C <sub>12</sub> H <sub>26</sub> N <sub>2</sub> O <sub>4</sub> | Storage:          | -20°C±5°C Protected from light and Sealed |
| Molecular Weight:  | 262.35                                                        |                   |                                           |

Chemical Structure:



| Test Items     | Method            | Results                |
|----------------|-------------------|------------------------|
| Appearance     | Visual inspection | Pale Yellow Semi-solid |
| Identification | LCMS&HNMR         | Confirmed              |
| Purity         | HPLC              | 100.0000%              |
| Loss On Drying | TGA               | 2.905%                 |
| Assay          |                   | 97.1%                  |

## Comment:

**CATO Research Chemicals Inc.**

The calculation of the 100% 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:

*Lily*

Reviewed by:

*Hinlam*

Aporoved by General manager:

*David*

Date: Jul 20, 2023

Date: Jul 25, 2023

Date: Jul 25, 2023

